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ABSTRACT

"Eskimo Medicine Man" is a record of primitive Alaskan life in the 1930's. It records the experiences in Alaska's remote areas of Dr. Otto George, the last "traveling physician" for the Department of Interior's Indian Service, when in all the territory (an area one-fifth that of the contiguous United States) there were fewer than sixty thousand persons. This book deals with the Eskimos of the Bering Sea, along the coast of the Artic Ocean, the areas of the Kuskokwim rivershed, and of the lower Yukon. The notes from Dr. George's eight diaries furnish the materials for this volume, documenting the time, the peoples and their ancient way of life. The photographs used to illustrate the book are those taken by Dr. George and developed by him, often with water from the silt-laden Kuskokwim River or melted snow. Some of the incidents Dr. George relates concern the difficulties of traveling to, from, or over Alaska: of finding groceries, even at great cost: and of dealing with the natives' superstitious acceptance of tuberculosis. Dr. George details his fight against that disease and includes his impressions and thoughts during a stay along the Bering Sea with villagers who were free of tuberculosis because they still practiced the ancient ways of building new winter homes each fall, letting spring floods wipe out dirt and germs. (AN)

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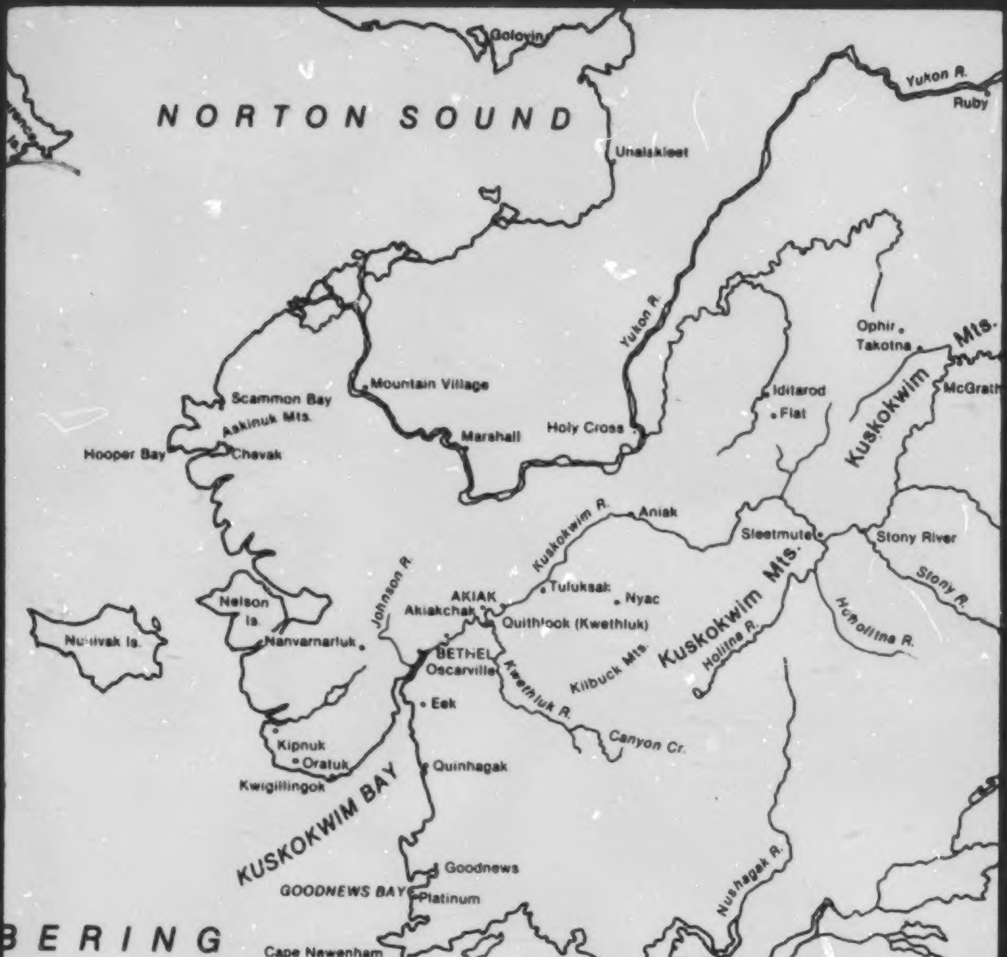
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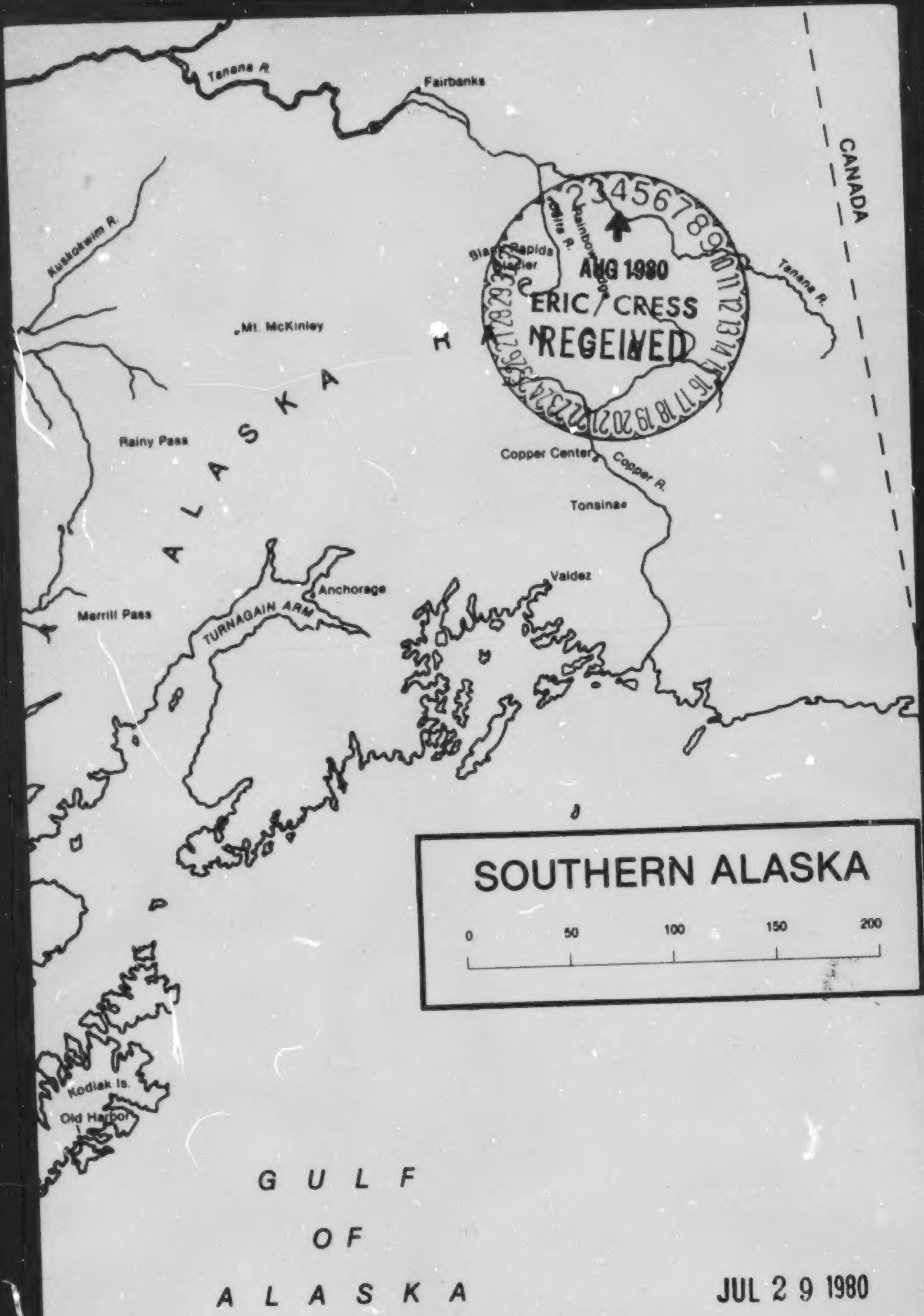
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Eskimo Medicine Man

Dr. Otto George

OHS
1979

To my wife
Virginia

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Note: The photographs used to illustrate *Eskimo Medicine Man* were all taken by Dr. Otto George. Faced with primitive conditions in both the Kuskokwim and Barrow regions, Dr. George still managed to develop and print his pictorical record; often he had to use water from the silt-laden Kuskokwim River or melted snow to process his photographs. As a result of his careful diligence we now have a visual record of the George family's sojourn in Alaska.

Maps

Southern Alaska Front endpaper

West Coast of North America Frontis

Northern Alaska Back endpaper

Foreword

Eskimo Medicine Man is a record of primitive Alaskan life in the 1930s. It records the experiences in Alaska's remote areas of the last "traveling physician" for the Department of Interior's Indian Service, when in all the territory (an area one-fifth that of the contiguous United States) there were fewer than sixty thousand persons. This book deals with the Eskimos of the Bering Sea, along the coast of the Arctic Ocean, the areas of the Kuskokwim rivershed and of the lower Yukon.

Otto George was born and reared on Oklahoma's Kiowa Indian Reservation. He attended the Chicago Art Institute, joined the Army (serving overseas in World War I), received a Bachelor's degree in 1925 from Portland's Reed College and a M.D. from the University of Oregon Medical School in 1930, externed at Portland's Good Samaritan Hospital (where he met his future wife, Virginia Brown), practiced in Portland, and (in order to qualify for an Alaskan assignment) passed his tests to become a surgeon with Civil Service. He spent summers with the U.S. Forest Service working in the rugged Cascade Mountains of Oregon, and winters he skied on the slopes of Mt. Hood, where he aided injured skiers in a small clinic at Government Camp.

All his years he craved for a life in the north country (Dr. George and his wife read all available books on Alaska), and when he was offered a position as "traveling physician" at Akiak on the Kuskokwim River (a place he had never heard of nor could find on the map of Alaska), he immediately accepted it.

During his Indian Service years, Dr. George kept a diary—filling eight books by recording at night the experiences of the day, noting primarily those things not found in the books he had read. These notes furnish the materials for this volume, documenting the time and the peoples and their ancient way of life—as no record ever will again.

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A number of persons associated with the Oregon Historical Society have aided in the editing and production of this volume. Early review of the manuscript and proofreading were done by Donald P. Abbott, Terence O'Donnell and Priscilla Knuth. Versions of the manuscript were typed by Katie Omundson and L. Diane Worley. The maps were produced by Seoni Baird, and the index by Helen Bledsoe. Bruce T. Hamilton was responsible for the editing, design and production of the book. Special thanks to Thomas Vaughan, Priscilla Knuth and Donald P. Abbott for their support of this project.

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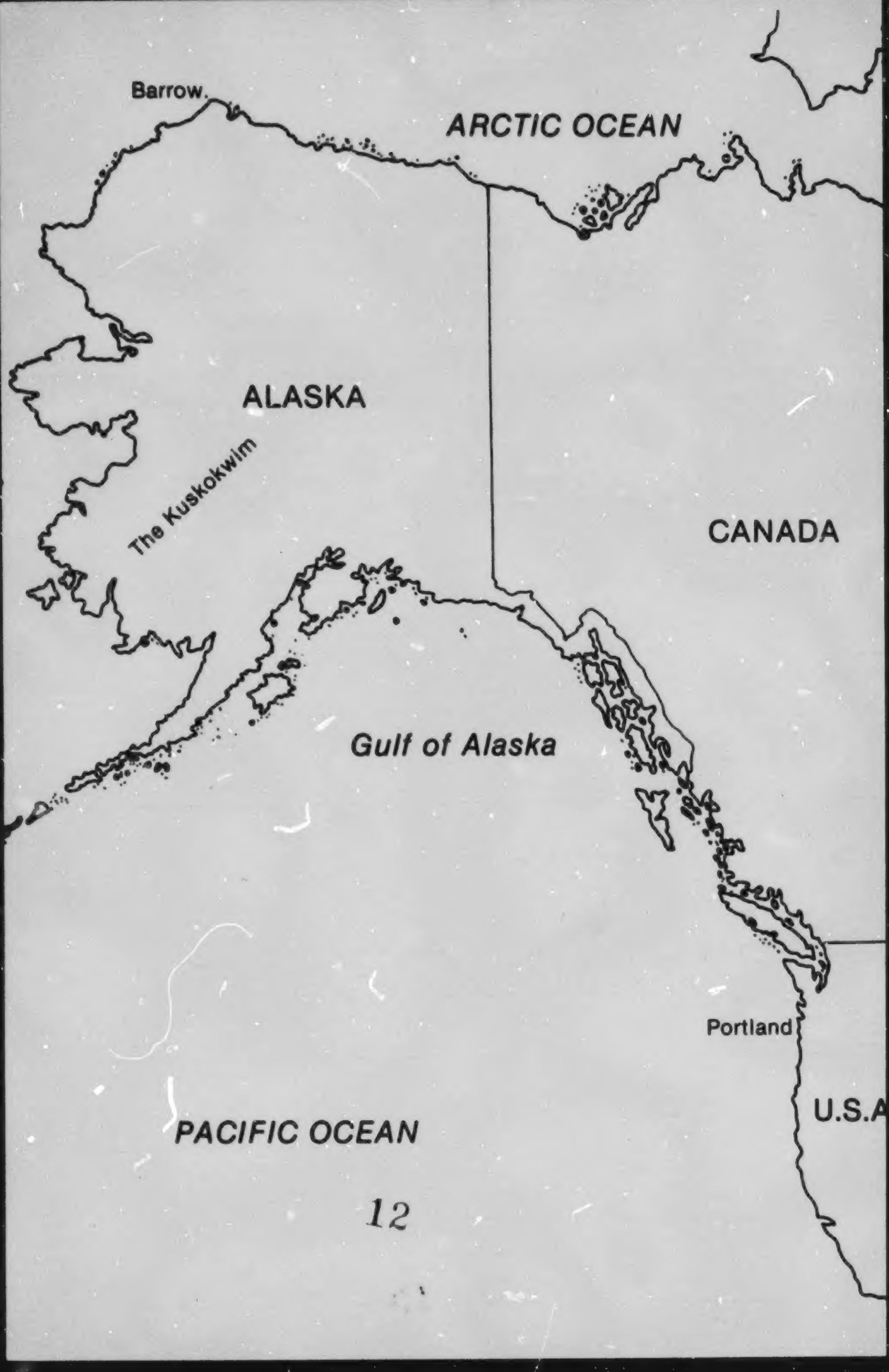
Barrow
ARCTIC OCEAN
ALASKA
The Kuskokwim
CANADA
Gulf of Alaska
Portland
U.S.A
PACIFIC OCEAN

Our Dream of Alaska

My earliest recollections are of a morning when, on awakening, I found a bottle of patent medicine on the windowsill beside my bed. I loved its taste so drank my fill. I recall how good the first swallow was; how later it did not seem so pleasing. Then I fell into a deep sleep from which neither my mother nor father could arouse me. The next thing I remember was someone tossing me up and catching me in his arms. It was the doctor. He was smiling and talking to me. I thought him the nicest man I had ever seen. Then and there I resolved to be a doctor, an ambition I never abandoned, although it seemed such an impossible goal. However, I did at length receive my M.D. in 1930, and began practicing in Portland, Oregon.

While externing at a Portland hospital, I met a student nurse, Virginia Brown, who had migrated with her parents to Oregon. She had a sweet smile, was five feet two, and tipped the scales at little more than a hundred pounds. I courted her there and later while she worked as a stewardess, first for Varney and then for United Airlines. It took two years of bouncing around in the air to make her decide she would be happier on the ground. We were married and, eventually, had a son, Paul. My practice grew. Soon I had no time I could call my own. More and more I longed for the out-of-doors and disliked the confinement of the big city.

We had heard many tales of Alaska and were fascinated by them. Together we read all the books and all the bright folders put out by the travel bureaus that mentioned Alaska. In our minds we pictured its unbelievable grandeur and beauty and in dreaming we placed all the things we longed for in life there. We built air castles picturing Alaska somewhat as the beautiful Oregon mountain country, only on a larger scale, and with more opportunity for enjoying it. We would have a little home and fish, hunt and have time for leisure and friends, others who sought a similar existence. We expected we would find rugged, honest, mountain folk who cared more for living than for money.

Eventually our hopes grew faint, though I had long since taken and passed the Civil Service examination for the United States Medical Service. Then one morning a messenger brought a yellow envelope, a wire from Washington, D.C., and

I hastened to read. I was offered a choice of two positions: one as a physician at Metlakatla (a town on Annette Island, near Ketchikan), the other as traveling physician, with headquarters at Akiak, on the Kuskokwim River. I selected Akiak because I had never heard the name and there was so little about the Kuskokwim in the literature we had on Alaska. I inquired of one man who had sailed the Bering Sea and the Arctic, and he said it was "back of the backwoods."

I gazed at the yellow telegram; this was the realization of my hopes and dreams. I dashed to the nearest telegraph office and wired my one word reply—"Yes!" Then I telephoned the good news to my wife. When, at last, a letter arrived from Washington telling us to report to Seattle in order that we might sail on the S.S. *William M. Tupper*, we were beside ourselves with joy and excitement.

The *William M. Tupper* tugged at her hawser at Pier Two on the Seattle waterfront on the morning of August 22, 1936. She could not be mistaken for anything but a freighter. Her rusted, battered plates squatted in the water almost to the rail, where sacks of coal were piled higher than a man's head. We went aboard early, as soon as the pier guards would let us through the gates, and threaded our way among piles of supplies littering the deck. All seemed confusion. The ship's deckhouse barely could be seen above the forward deck, which was piled to the prow with huge, steel dredge pontoons lashed with heavy chains. The afterdeck was stacked with mining equipment, crates, boxes, barrels, live fowl and howling dogs. To the rear of the bridge were the staterooms, and we were shown to one of the small ones, where we installed ourselves comfortably enough in what was to be our home for the next two weeks.

Ten other passengers completed the list of travelers—thirteen in all—until the captain invited a fourteenth to go as his guest. There were three "sourdoughs" who had gone "outside" to purchase their year's supplies; for one it was his first trip out in 30 years. They had evidently entertained themselves with one continuous party while in Seattle. There were four school teachers (one going to Alaska for the first time), a
2 beautician (a petite blonde who planned to establish a beauty parlor), and a little native girl returning from a mental institution. Number 13 was an inlaw of the captain's (taking the trip for his health), and number 14, Mr. Stecker, Captain Charles S. Carlson's guest.

Mr. Stecker had organized the first Moravian mission at

Bethel, on the Kuskokwim River, 50 years before, and was returning for a last look. He was a fine old man, tall, erect, broad-shouldered and deep-chested; he had been a powerful man. His twinkling eyes peered through slits formed by his eyelids, and wrinkles at his temples gave the appearance of a perpetual smile. Sideburns and a beard added a patriarchal air. He was respected and loved at once by all on board.

When the last load had been slung aboard, the gangplank was pulled in. The final restraining rope was loosened, black smoke belched from the funnel and clouds of steam hissed from the whistle's resounding farewell. The *Tupper* pointed her bow out across Puget Sound and headed for the Pacific. But not for long! To our concern, the ship began to turn and approach the dock. Our sourdoughs had been left behind! Soon we saw them surrounded by a group of their cronies. They concluded their farewells, then with their baggage, were hauled aboard, and we again put out to sea.

On the seventh day out Chirikof Island appeared as a low, purple blotch on the horizon; at noon we saw mountain peaks to the north and later we were ploughing through a calm sea with jagged rocks rising a few feet above the water on all sides.* As night fell we gathered on the bridge to admire the view and the colorful sunset, staying until the last bit of color faded. The stars burned brightly in a cloudless sky while the ship rose and fell on the swell, and her propellers shook the deck beneath us with an unchanging rhythm. At last we retired. We were very happy.

Daylight found us skirting a beautiful, mountainous coast —it was just as we had pictured Alaska. We were in the Aleutians. The ship stopped at a cannery dock at the fishing village of Sand Point. If we were thrilled before, we were completely carried away by the scenery we saw there.

As we continued on our way the mountains grew more and more rugged and vividly colored. As the winds blew, the summits were shrouded in gray fog, which formed long streamers that dipped into the deep canyons below. Occasionally an entire mountain would be revealed, only to be screened from view a few seconds later. We stayed at the rail all day, enthralled by the ever-changing panorama before us. The line of 3
low islands sheltered us from the ocean to the south, the sea was smooth as a lake and the weather sunny and warm until

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*Chirikof Island lies 80 miles off the Alaska Peninsula at approximately 56° N and 155° W; the mountains are the Aleutian Range.

we neared Unimak Pass. The strait is the cradle of storms, the rough and stormbound point where the warm waters of the Pacific meet the icy currents of the Bering Sea. Fog and wind descended upon us, enveloping everything in darkness, but not before we saw Mount Shishaldin, an active volcano on Unimak Island, which emitted large clouds of smoke that trailed down its sides and intermittently belched flames into the sky, silhouetting the snowy peaks. It was an eerie display.

During the night I awoke with a start. The curtains beside my bunk whipped in the gale that roared through the open window. I hastened to close it to keep out the water from the rough sea. My berth swayed with the roll of the ship. From outside came the sound of splashing water, the roar of the storm and the shrill musical note of the wind tearing at the ship's rigging above. A heavy object crashed to the deck over our stateroom, followed by the sound of hurried feet, and the hammering and rattle of chains on the deck. Uneasy, yet warm and comfortable in my bunk and rocked as in a cradle, I was soon fast asleep.

We passed through Unimak Pass during the night and were now on the Bering Sea, a different world. The sea was as molten lead. The ship's engines, which had slowed during the storm, were turning at normal speed again. Thousands of birds flew about the ship, called sea parrots; they were feeding on schools of small fish. In the water we saw many Portuguese men-of-war, which resembled brightly colored dinner plates. The morning was warm. To the east was land, yellow-green, low, rolling hills overhung with gray clouds. With the coming of the sun these passed away and pyramid-like mountains, purple and gray, came into view. Two peaks, higher than the others, were snow-covered with white hoods shrouding their topmost reaches, while great glaciers appeared as green mirrors reflecting the sunlight.

We approached Bird Island, a rock that jutted up from the ocean's bed, and named for the large number of birds nesting there. As we neared the island the captain sounded the ship's whistle and the birds rose in clouds and circled the island's crest. Soon they settled back, only to be aroused by another
4 blast of the whistle.

We proceeded slowly, keeping the coastline in view. The sea was very shallow and soundings had to be taken. Navigation was by bearings taken from recognized mountain peaks; when the mountains were obscured, we dropped anchor and waited. Approaching Goodnews Bay we were making good progress, when trouble overtook us. A sudden slackening of speed, jangling bells, shouts from the bridge, and much scurrying about by the crew—the ship was fast aground. The ship's propellers, in reverse, were sending streams of mud forward, but we did not budge. Fortunately the sea was smooth, but the tide was running out and if a storm had blown up before we were free, the ship could have been rocked to pieces.

A small boat (the *Husky*) came from Goodnews Bay, towing another, and the work of transferring tons of freight began. Two of our passengers, the Lloyds, who were government teachers on their way to the village of Quinhagak, left us here. We felt sorry for Mrs. Lloyd, who had spent much of her time on board in bed with seasickness, and who now had to choose between the hold with its fur-clad passengers and the open deck. With the coming of the high tide and the lightening of the ship, we were able to free the vessel. In the early morning light we entered the broad bay of the Kuskokwim. It was 30 or 40 miles from shore to shore, only low mud flats to be seen on either side. A low island in the bay called Seal Rock was the nesting place for thousands of birds safe from the foxes on the mainland.

We anchored for hours waiting for the rising tide, then proceeded upriver at full speed. We went aground again, this time on a sand bar, and the ship's propellers would not move us. The tides at that season were equal and there was little hope of getting off until one tide became higher than the others or the wind shoved the water upriver.

We ate, slept and waited with one eye on the weather. The following afternoon we floated and again moved upstream a short way. We approached Oscar's Crossing, the last shallow bar. The river there was quite narrow. The mud flats on either side had occasional clumps of low-growing willows. Once we passed a village of half a dozen tumble-down, weathered shacks. On the riverbank were waving, shouting native men, women and children; in the water small kayaks kept pace with our ship.

For the third time the *Tupper* went aground. A cold drizzle began, then the wind and darkness closed over all. The captain and crew seemed very disappointed and we all felt the gloom. We knew how they must feel—it was Saturday evening and Bethel with its welcoming dance was only a few miles away.

With the remaining passengers we said goodbye to the captain and crew and went aboard the pilot boat, the *Moravian*. We took shelter from the storm in the lee of the small cabin and soon were alongside a high bank where the boat was made fast. A wet slippery plank a foot wide, with crosspieces for footholds, was slid aboard and from the deck we scrambled to the grassy bank above. We had arrived in Bethel. We hurried into a nearby house and there met the Dreberts, the missionaries, who welcomed us and sat us down to an excellent meal. To our surprise we learned that much of the food on the table had been grown in their greenhouse or garden.

We were much concerned about lodging for the night because we were told the hotel—"roadhouse" to Alaskans—was filled to the brim. As we were wondering what to do we were offered lodging in a nearby trading post. We accepted the offer with a great sigh of relief, but before we could assemble our belongings and start for the post there came a knock at the door and a lady dressed in dripping oilskins entered. She insisted we go with her to meet "Auntie Lou" whom, she explained, was waiting for us, and she could not think of disappointing her. We did not want to go out into the stormy night again, but the stranger was insistent, and being new to Alaska we thought it best to humor her.

Reluctantly we drew on our wet clothing and followed our guide, who led the way with her flashlight. A board walk about two feet wide, very slippery in the rain, ran parallel to the river. For the better part of a mile there was no street, just houses in disorderly array facing the river and all on the upper side of the walk. We bent low to shield ourselves from the rain, but were thoroughly soaked when at last we were ushered into a rather comfortably furnished house where we were greeted by a sturdy woman past middle age. This was Auntie Lou, who for 16 years had been Bethel's village nurse. She plied us with questions and related with evident pride her work with the natives during her long career with the Health Service. She spoke of her work with deep sincerity, and we were touched with the thought she had devoted her life so wholeheartedly to it.

6 The next morning we viewed our long anticipated "paradise." First there were the modest houses of the mission, all neatly painted white. There was one for each of the mission families and one for the radio operator, who was a member of the Alaska Communications Service, a branch of the United States Army, whose duty was to transmit all messages for the

territory. There was also a warehouse, a store, a sawmill and on the hillside below many small houses occupied by the mission natives. These houses were made of logs and boards and were old and weathered. On the hilltop above there stood a number of white crosses, the village cemetery.

At the water's edge we saw a low, rambling store building, its top barely level with the tundra. This was a trading post operated by Bob Gurkey, an old-time Alaskan. The lowest part of the village had a dock extending out into the river, and on the land many neatly arranged, green-painted buildings. A large sign proclaimed them the "Northern Commercial Company." There was a store, a roadhouse, warehouses and again many small wooden buildings; these were occupied by a cosmopolitan group of whites and "N.C. natives."

Beyond, the hill sloped gently up, and there stood the Department of Interior's school for natives and alongside it a new building, likewise a school, the territorial, for whites. There were more trading posts beyond this and shacks occupied by whites and natives, the so-called "heathen" part of Bethel village.

To our delight we found that the trader from Akiak was in Bethel. His name was Carl I. Carlson, better known as "Poling Boat Carlson." We found him a very agreeable person, a Norwegian with an English accent. He knew we were enroute to Akiak and had come to Bethel with the intention of taking us upriver to our new home. He wanted to stay in Bethel for another day, but when he saw how eager we were to be on our way, he changed his mind and decided to go to Akiak that night. Newcomers that we were, we did not realize what the coming of the *Tupper* meant to these Alaskans. "*Tupper* time" was the event of the year as it was the only ship coming to Bethel and it had the supplies for all the people of the Kuskokwim for the year. Practically the entire population came to Bethel for their supplies as well as for the renewal of old acquaintances. They came from the mining camps of Ophir, Iditarod, Ruby, Flat, McGrath on the headwaters, and from Togiak, Newenham, Goodnews, Platinum and Nelson Island on the Bering Sea. None would miss the event. It was jolly time for all and they celebrated—many for days.

We were soon on our way with Mr. Carlson but quickly regretted our haste, for on the river a wind struck with gale force, causing the little boat to bounce like a cork on the rough waters. A cold rain set in and night fell. Mr. Carlson, Virginia, baby Paul and I crowded into the tiny cabin while a native in oilskins steered from the unsheltered stern of the boat. It was past midnight when we saw a light in the distance but it was a long while before we put in and dropped anchor before the village. We transferred to a rowboat and went ashore.

This was the end of a long journey and the beginning of a new adventure. We had arrived in our "Garden of Eden" of which we had so long dreamed. Our eyes strained to pierce the darkness, but in vain. Sight of our new home would have to wait until morning.

Captain Carlson of the *Tupper* during the voyage to Alaska.

Akiak – Our Alaskan Home

As we neared the shore we were greeted by a chorus of canine yelps and strange voices speaking words foreign to us. One we understood—a young girl with a Norwegian accent calling, "Hello, Uncle Carl." This was the trader's niece. She greeted her uncle, who introduced us, then led the way with a flashlight to their home, a low, rambling, log house with a set of deer antlers over the door.

The door opened with a pleasant tinkling of bells. An aisle piled high with goods as in a general store led to the living quarters. Until then we had thought we were in remote Alaska, but this home we could easily imagine to be some old-world house. Square-hewn logs, stained brown and chinked with moss, made the walls of the livingroom. In one corner stood a piano, in another an upholstered davenport with a handsome brown bear rug before it, eyes shining, mouth open. Flowers and plants brightened the center table and the windowsills. On the wall was a shelf filled with books that would do credit to a professor of philosophy, and paintings and etchings by the Alaskan artists Eustace Ziegler and Sid Lawrence hung on either side.

We decided that Gyda, Carlson's niece, was an excellent cook as we ate her baked duck and sipped white wine. Coming from Norway after the death of Mrs. Carlson, she had kept her uncle company since her arrival. It was easy to see that she loved the country.

We learned that Akiak consisted of two villages. The one we were in was called "White Akiak" and was situated on the east bank of the river, while "Native Akiak" was on the west bank. The whites, and the natives who worked for them, lived in "White Akiak." The other natives, the school teacher, and the doctor lived on the west bank.

Next morning I awakened at dawn, anxious to have a look at our new home. We were only afraid it might be too civilized. We hoped for primitive natives and a country as nearly untouched by white men as we could find. I dressed and stole out the back door to see a beautifully colored sky above the willows, which grew to the edge of the village. An inadvertent glance into an open door on my way out revealed a sight which touched me. I saw my host sleeping on an improvised

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cot, so that we might have his comfortable bed. That was Alaskan hospitality.

The trader's building had a gently sloping, shingled roof surmounted by two tin stovepipes shielded at the top from rain and snow. All around were small log and board houses which made up the remainder of the village. These were weatherbeaten and unpainted, but some were in good repair. One was the territorial school, which consisted of a schoolroom, entered by way of a storm shed, and a lean-to shed room which housed the teacher. The better houses were those of white residents. Flower beds, bright with yellow marigolds, grew along the sunny side of the trader's house. These Gyda had planted.

Little paths ran from house to house and I took one of these, parting the overhanging grass sparkling white with frost. Wildcranberry bushes heavy with fruit grew to the riverbank. I walked in a garden where turnips, cauliflower, carrots, potatoes and celery made good growth. A tiny board shack stood beside the garden, smoke rising from its rusted stovepipe. I suspected that its inhabitants were awake and was about to turn back when a man as tall as the house emerged. He appeared to be about 70 years of age, was all arms and legs, and stood very erect. Apparently he intended to chop some wood for he carried an axe. He greeted me in a friendly manner and guessed my identity, as he had heard by radio of the arrival of a new doctor. He wanted to show me his farm, which he had homesteaded, and led the way across several small clearings, pointing with pride to a tract cleared last year, another the year before and others before that. I concluded he was one of those Alaskans I had been hearing about who had "missed too many boats outside."

Not wishing to delay breakfast, I retraced my steps. Virginia and I were anxious to see our own village and so as soon as breakfast was over we placed our belongings in a boat Mr. Carlson provided and said goodbye to our friends and the neighbors. A boy rowed us across the mile-wide river to a narrow, muddy beach at the foot of a high bank.

Looking up we saw the bank lined with strange people, big
10 and little, their faces brown and smiling. All were dressed in long brown parkas with hoods trimmed with fur. As we surveyed them they just stood looking at us. A diesel engine coughed in the building beside us. It was a sawmill and above it was a large sign: "Kuskokwim Reindeer Company Sawmill." Next to it—of all things to find in an Eskimo village—

was an ice house. The mill was operated entirely by natives. The logs they were sawing were more like poles of spruce and birch, none being greater than 16 inches in diameter. They were dragged by a steel cable that was anchored to a raft on the river. The ice house stored ice cut on the river in early winter.

Leaving our baggage, we climbed up the bank and at last caught sight of the homes—log buildings in all stages of decay, some falling down, others barely standing. Farther in the village were large buildings; one larger than the rest, we guessed to be the deserted hospital, a two-story building once painted white. Now the boards were weathered and falling apart, many windows were broken, tattered and faded window shades hanging limply in them. There was a board walk, but much of it was missing and the remainder was unsafe to walk upon.

We passed small native houses nearby and beside each of these stood a smaller building, possibly six by eight feet in size, with side walls only two or three feet high. They were mounted on stilts or logs taller than a man, roofed with sand, and the small entrance was barely large enough for a man to crawl through. A log leaned up to each door, and was notched in such a manner that it served as a ladder to the entrance. These buildings were caches and held the food and supplies of the natives.

Dogs were chained beside the natives' houses, in groups of nine to fifteen. A long cable stretched from one stake to another and from this cable a chain extended to the neck of each dog, so it was able to move about but unable to reach its neighbor. Each dog had dug a hole in which it lay to escape the tormenting flies and mosquitoes during the summer months. As we passed, the dogs set up a terrific din. We were glad they were securely chained to their leashes as they lunged at us savagely.

We were led, past several native shacks, to the rear of the hospital and the physician's residence. The latter was a three-room house which might once have been painted white. Over the door hung a sign with indistinct, weathered lettering reading "Office." Before the door stood a wooden cross on a small mound covered with faded flowers. This, we surmised, was in memory of the late Dr. Meyers, who had left hurriedly on a call six months before, became ill and died. Two other doctors before him had died while serving the people of the region. (Dr. Houston slipped from the medical boat on the Yukon and was drowned. Another took sick while caring for the natives during the flu epidemic and died at Hooper Bay. His wife, waiting for him to return to Akiak, heard of his death two or three months later.) To one side of the office stood a white church. Between the two buildings and to the rear of them a forest of white crosses—the village graveyard—extended to the willows and the ravine beyond.

We turned back to inspect our house, hoping the interior would prove more pleasing than the exterior. Unlocking the rusty padlock we entered first a small storm shed, then the kitchen and livingroom, and surveyed them with dismay. Old clothing and papers littered the floors, dead blow flies lay everywhere, desk drawers had been emptied and added to the litter. Shelves, presumably meant to hold medicines, occupied one wall. It appeared that the livingroom had been used as the office. In the bedroom was an iron bedstead with a soiled, torn mattress upon which an assortment of badly soiled clothing and bedding was piled. Two or three broken chairs and a cookstove completed the furnishings. This was our home, but hardly as we had dreamed it. I looked at Virginia. Her eyes filled with tears. The question in both her mind and mine was "Could we live through the approaching winter in this?"

We had been told there were other vacant buildings in the village, so we decided to inspect them. We saw a large newly painted yellow building in a clearing somewhat away from the village, and following a path through willows and alders came to the government school. It was a combination residence and school and appeared to be quite modern, with electric wiring and a water system. The school teachers were away, in Bethel no doubt.

Returning to the village we saw two small empty houses overlooking the river. One of them, we decided, should be our home. As we inspected it we suddenly realized we were not alone. The village youngsters and many of the adults who had met us at the water's edge crowded round, holding our belongings, which they had competed with each other to carry. We reclaimed these, thanking them. An old lady presented us with a fish, which reminded us we had no food or other supplies. We thought these villagers very thoughtful and kind, but when they would not depart, it occurred to us they expected pay for their services. It took all our spare change to pay for our baggage and the fish.

We then took inventory of the situation. We were somewhat confused, to say the least. Only of one thing were we certain—our dream of primitive, romantic Alaska had materialized in the fullest sense of the word. Not only were we in a strange village among strange, primitive people, we were also without food or supplies. Had we not asked for the primitive life? We began to suspect that was exactly what we were to have.

But there could be no thought of leaving. Our home, office and practice we had given to another doctor and we had spent all we had in getting to where we were. The fact that the *Tupper* was still in Bethel did not present a way out, and besides we had come with the intention of becoming permanent residents of Alaska. The light began to dawn upon us, explaining something that had heretofore puzzled us. We had received two telegrams from Washington, D.C. warning us that unless we stayed for a year our transportation would not be paid. Now we knew the reason for those messages.

Still we were young, and though discouraged we were also excited and enthused. Soon we would receive our food, baggage and supplies, which were still on the *Tupper*. We began by exploring the deserted buildings again and found a cookstove, a chair, some wooden boxes, a three-quarter size bedstead and full size springs, some unused dishes, frying pan, kettle, bucket and a bread pan, and with these we set up housekeeping. When we were hungry we persuaded a native to take us across the river to the trading post where we purchased a few groceries at prices never before encountered. There was much to be done. I would have plenty of work to do caring for the health of that vast territory assigned me and we had to prepare for the long winter ahead.

First Call

September 13, 1936, our first Sunday in Akiak, was very quiet. We cleaned house and arranged the furniture and our few personal belongings. On the riverbank in front of our house the natives, large and small, dressed in their best furs, walked back and forth, the better to inspect us, we supposed.

Suddenly we heard the hum of a low flying airplane, which circled two or three times, then disappeared in the direction whence it came. Minutes later a native boy came running and between gasps for breath asked me to hurry to meet the pilot. Looking in the direction the boy pointed, I saw the pilot approaching rapidly, the village children running at his heels. He was long and lank and covered the ground in great strides, evidently in great haste.

He introduced himself as Oscar Winchell. I had heard him spoken of as "Cowboy" Winchell and recalled that he was considered a daring, and even reckless, pilot. Though he had a reputation for wit and humor, there was no smile on his face. A plane had just crashed at Goodnews, killing the pilot and seriously injuring the passenger, Jay Johnson, owner and operator of the Goodnews Bay mining operation. Earlier that day, at the request of more experienced pilots, Mr. Johnson's pilot had promised not to attempt the short trip to Platinum. Why he changed his mind no one knew.

Winchell urged all haste so that we might reach Goodnews before dark. My medical bag and one with surgical instruments were packed and ready and I grabbed them and we hurried to the plane. It was a Curtiss Robin, popular in Alaska, as it could be landed at slow speed and get down on short runways. There were two seats and I could see ahead from the rear one. The beach was so littered with driftwood it did not seem possible we could dodge it all, but with a short take-off Winchell lifted the plane to comparative safety. With a steep bank he reversed our take-off and headed downriver. This was my first plane ride since wartime 1918 when I was a member of Squadron 307, training with the British in Bristol Fighters, with crazy men at the controls, fatalists who thought death would come at the appointed time, fly as they might. I suspected this man was of similar caliber, and I might as well adapt myself to the code.

The Kuskokwim shimmered below us, first leaden, then shining silver, forming wide S curves as far as we could see. To the eastward were the mountains, Prussian blue in the sun. Everywhere were lakes; it appeared more than half the land was covered with water. Black spruce dotted the landscape; gray and yellow willows and brown grass covered the remaining land. Soon we sighted the line of huts along the riverbank at Bethel. Winchell dipped his plane's wings in salute; then we struck out cross-country, leaving the river.

Long wedges of geese flew beneath and beside us. An hour or more passed; the sky became clouded. The glass windshield and the sides of the plane rattled, rain blotted out all vision, and as the gale increased we were tossed this way and that. Winchell lowered the window and water drenched us. He extended an arm and wiped at the windshield but with little success. We flew at one thousand feet, just under the clouds, until we sighted the Bering Sea coastline. Now the wind really blew. The "Wooley Walleys" is the name given them, for these air currents whip and swirl over the mountains and down to the sea. We followed the shoreline and soon were over a group of buildings. On the low sandspit across Goodnews Bay were the half-dozen buildings constituting the village of Platinum. On the adjoining beach lay barrels, piles of lumber, machinery and equipment.

By now it was evening. Fog banks hovered over the mountains and white-crested waves rolled higher and higher on the ocean beneath. We headed inland, up over a low mountain pass and down a ravine. We passed another small group of houses, around which were long, black patches where the tundra had been stripped away. This was platinum ground where the mineral was washed down by streams of water from hydraulic nozzles.

Winchell then flew near the ground. It appeared we were about to land, but we ran into fog. We flew back and then up a ravine and suddenly there appeared directly in our way black earth and rocks. It seemed we would crash head-on into the mountainside when a small line of sky appeared and widened in front of us. We had passed the crest of the mountain and I saw we were over a valley. Below was a tiny landing field—our destination. I breathed again.

We hovered above the little square of tundra marked only by a row of sticks with streamers of sodden rags to mark the field and show the wind's direction. By the time we were close enough to see them we had passed the field. Twice we attempted to land where Johnson and his pilot had been thrown into the earth earlier in the day. We climbed toward the summit over black mountainside, skimmed under the fog, our wheels almost scraping the top, and again settled for the landing. A gust of wind tossed our plane like a leaf and we were upsidedown. The motor roared and the plane responded and was righted but we had long since passed the field. We tried again. This time I thought we had succeeded; the motor idled for the landing, and the next instant we were thrown vertically. Again the motor raced as one wing skimmed inches above the tundra. It seemed we went at dizzying speed. The engine responded and we found ourselves in the air and facing the mountain wall. We flew back up the canyon and over as before, but the strip of sky was ever lessening and it was almost dark. Soon I again saw the Bering Sea, then the sand spit. Winchell headed out to sea, turned and came directly at the narrow beach bellying into the gale. The wheels touched the water's edge and we came to a stop.

Winchell flung open the plane door and shouted, above the roar of the storm, "Grab the wing and swing onto it!" I jumped from the plane and, grabbing the wing, applied all my weight; though tossed like a pendulum I dared not let go. From somewhere a man came running and while I kept my precarious hold on the wing he fastened a rope to form a swing. As we both hung suspended Winchell taxied the plane to the end of the field where there were steel cables anchored in the sand, and to these we made the plane fast.

Leaning into the rain and wind, I followed Winchell into Platinum and to a small cabin. Several roughly-clad men greeted Winchell warmly. One poured coffee; another called Winchell to come talk into a microphone. Then they handed it to me. A voice was saying, "Johnson's eyes are open and he scarcely breathes, but his heart is beating." I gave advice for his care until my arrival. I took the cup of coffee proffered me, then, when a young man came and announced he was to guide me, I drew on my coat and again faced the weather.

Nine miles to walk, I was told. I wondered if these were "mountain miles" as reputedly measured by Norwegians, who walk seven and count one. It was now six o'clock, I observed, as my guide took one of my bags and I the other. We leaned into the wind. For the next hour our way lay along the sandy beach and it was good walking. We hurried in order to use all the remaining twilight.

Leaving the beach, I walked for the first time on tundra.

Someone at Platinum had said walking would be difficult; now I found what he meant. Clumps of grass grew close together, and while from a distance they had the appearance of a smooth meadow, the soil between each tuft of grass stood like a fence post covered with a thatch of curly grass. Our feet would slip from the wet grass and we would drop knee- or hip-deep into the water with each uncertain step. It became very dark for there were no stars. Our flashlights began to show signs of failing as hour after hour passed. Our way seemed to be through shallow streams before reaching a mountain slope, which we climbed to the summit. It was with great relief that we saw lights in the valley below and we approached them rapidly.

Suddenly we were walking in what appeared to be ploughed ground with streams of water flowing everywhere. Huge jets of water were being thrown from hydraulics. Each of the big nozzles was wrestled by a man in drenched oilskins and boots. I could not envy these workers the money they earned, even though they were mining the world's richest platinum ground. At that moment the "glamour" of mining was somewhat dimmed for me. I had thought mining was quite different from this and had not pictured the mud, grime and hardship.

Several men came out of the dark. One led us to a house where we had cake and coffee, a welcome treat. He produced a Coleman lantern, a great improvement over the flashlights. On inquiring whether we could find the camp farther down, my guide assured our host that he knew the way perfectly.

Once more we set out in the rain and fog, the hills sheltering us from the wind. The night seemed to have become darker and colder after we left the floodlights of the camp. Our way led up another mountainside and we continued at a steady pace for several hours. I noticed that my guide became more and more uncertain; now and then he stopped and looked, first up, then down the mountainside.

"This looks like the way," he finally ventured. Then he appeared to be listening intently. "Do you hear the ocean?" he asked. I assured him that I did not. He explained that the mountain we were on ended abruptly at the ocean and that we should avoid walking off the cliff! At length I really became doubtful of my guide. We were so high on the mountain that fog obscured everything. I insisted that we head down. Slipping and sliding over mud and rocks, we made our way down until we were beneath the cloud.

Suddenly my companion called, "There's a light!" Looking down where he pointed, I saw a faint gleam. We headed toward it and soon came to a flashlight lying on a clump of grass beside the board wall of a tent. At our call a white man threw open the tent flap. Inside were a number of natives. A young girl, seeing our lantern, had called it a star. The man, who had doubted her, looked for himself and knew it to be the light of someone walking. Realizing we were expected at the camp, he had placed the light to guide us. We were very grateful for his thoughtfulness. We had passed the camp, but our new friend quickly led us back to it.

At the superintendent's tent we learned that Johnson had died at six o'clock that afternoon, just at the time we had started walking. I wondered why someone had not been sent to call us back. It was now early morning and we had walked steadily all night. As there was no need of seeing the bodies then, I was shown to a tent bunkhouse. After pulling off my wet clothing and getting between the warm blankets I was soon fast asleep.

Entering the cookhouse for breakfast later in the morning, I introduced myself to the two dozen men present. An air of gloom prevailed and conversation lagged. The meal was soon over.

Afterward I saw the broken bodies of the two men—a sickening sight. Later I walked along the little stream I had seen from the plane the day before. Two hundred yards from camp I came upon a landing wheel. A hundred feet farther on, nose down in the bare rock of the stream bed, was the tangled wreckage of the plane. Ten feet in any direction would have provided soft earth for the plane's fall. I did not want a souvenir. I turned and walked back to camp.

The men had worked from dawn sewing the bodies in canvas. They were then placed on bedsprings in a trailer. A Caterpillar tractor, rumbling and clanging, drew the trailer along the winding road to the beach. Johnson's 18-year-old son was to accompany his father's body outside. The driver of the Cat asked us to give him an hour's start and then to cut directly over the hill to the beach and intercept him. I spent the hour getting into dry clothing, returning the clothes the men had insisted on lending me, and eating. With a guide who, I was assured, knew the way, we set out across the tundra, passing on the way the tent we had seen the night before.

"This is Discovery Creek," the guide announced. An old native had told a white man at Goodnews that there was white gold in this creek. Though the white man did not believe it, he collected a sample of the white metal and sent it to Fairbanks for an assay. The report came back "high-grade platinum." Several other men had seen the metal, but passed it up thinking it to be tin and worthless. I asked the guide what the native got out of it.

"Oh, probably a little grub," was the reply.

The country certainly looked worthless enough with its rolling hills, long slopes, small streams, tundra everywhere, and the complete absence of trees. In the distance we could see small herds of reindeer. A quarter of a mile away I saw an animal I thought at first to be a jackrabbit. But when I saw its long, bushy tail as it was silhouetted against the skyline, I realized it was a fox.

"A red fox, most likely," the guide informed me.

After traveling a mile or more, we looked down on the Bering Sea 500 feet below. Here our guide took leave of us. To me he said, "Goodbye; hope we meet again," and to the now fatherless boy, "Carry on!"

The lad and I began our descent, resting often and looking frequently down the long sandy beach for the sight of the tractor. As it appeared we hastened to reach the beach. The Cat with its tragic load halted beside us. We climbed into the trailer; the tractor rumbled ahead. There was a passenger aboard who said he had been working for Johnson's mining company the past two years. Now he was going prospecting.

"Are there any bears in this region?" I inquired.

As an answer to my question he removed his hat and exhibited a long pink scar extending above the right eye over his scalp to the back of his neck. Then he showed me scars on his shoulder, right wrist and thigh.

"There are no brown bears here," he explained, "but there are plenty further inland along the river."

While unarmed he had come upon a female bear. Snarling and raging, she was on him. He knew his one chance for life was to feign death. After being mauled and thrown on the ground, he lay still. The bear retreated a short distance and lay down, watching him for a short while. Then, with a roar evidently intended to frighten him and determine whether he was dead or not, she rushed for him. Again he was mauled and chewed, until she was satisfied that he was dead. Despite his wounds he lay motionless for many minutes until she left. Then he dragged himself back to camp. It was a long, painful journey. The torn scalp kept falling over his eyes, adding to his other difficulties. Eventually, he made his way to the hospital at Anchorage where he spent many months convalescing.

At Platinum Winchell waited beside his plane on the sand. He was eager to be away. We transferred the bodies to the plane; from which the cabin seat had been removed. After the pilot was seated with young Johnson beside him there was no room for me. Furthermore, Winchell declined to attempt another landing on the muddy sand beach at Akiak. I had no choice but to remain. Platinum, I recalled, had been described by Captain Carlson as the village where "a native sometimes was blown against a house by the wind and held there until he starved to death."

In my haste when leaving Akiak I had not changed clothing and now was without purse or money. I had but one choice—to accept the hospitality of a trader named Olaf, provided he was willing to extend it to me. Still, being a tenderfoot, or "Cheechacker," I hesitated—especially as there were several others in similar circumstances in his two-room cabin. Mrs. Hurst, traveling nurse from Bethel, was one, having flown in during the morning to lend a helping hand if needed.

During the rest of the afternoon the nurse and I visited the natives in the vicinity. These natives lived in wooden huts covered with earth. Tuberculosis was prevalent. Two cases of Pott's Disease, tuberculosis of the spine, were also discovered. We persuaded one victim to accept treatment in the hospital for natives at Mountain Village. The other refused and would eventually become hunchbacked unless he died of pulmonary tuberculosis first. The Eskimo children and some of their elders were dressed in parkas of geese or crane skins with feathers attached. They reminded me of the pictures of penguins I had seen.

Back at the store I recognized the man who had given us coffee the night before and learned that he was Dave Stranberg, manager of the other mining company where we had seen hydraulics working. During his many years in Alaska he had made several stakes and lost them, but now had another one and was prospering.

We ate at one small table—Olaf, Mrs. Hurst, Stranberg and two others. I wondered where we would sleep as I had seen but one small bed. I had fallen asleep several times while the others conversed, and I was glad when Mr. Stranberg suggested we retire.

We were led outside, where the howling gale carried with it a drenching rain, and entered a small one-room building containing four steel cots and bedding. Using blankets, Mr.

Stranberg constructed a wall about one of the beds for Mrs. Hurst while he related, to our amusement, the story of the motion picture, "It Happened One Night"—the story of a runaway heiress, traveling incognito, and the newspaper reporter whom she met on a cross-country bus; how, when they were compelled to share a cabin at a trailer camp, the young man stretched a blanket to divide the room in two. They had dubbed the partition "The Walls of Jericho." The story was a long one but at last it was finished and Mrs. Hurst was able to retire in privacy.

At breakfast the next morning we watched through the window as the gale drove the rain before it and flattened the long, brown grass to the ground. As the storm continued unabated, the conversation drifted to books, especially those written about Alaska. *Arctic Village* was discussed first. The author, it seemed, lived among the people of the village of Weisman, enjoying their comradeship. After returning to the outside he published the intimate affairs of some of the prominent citizens in that village. In Alaska one speaks of places perhaps hundreds of miles distant as "neighboring villages," and since the old sourdoughs knew many of those who were the principal characters in that distant "Arctic Village," they laughed long and loudly at this joke on their neighbors. All agreed that books about Alaska were written purely for outside consumption.

The storm abated somewhat, though heavy clouds filled the sky and wind continued a gale. To pass the time I walked along the beach, now strewn with bleached and weathered driftwood, hundreds of glass balls from Japanese fishing nets, decomposing carcasses of reindeer, birds, beluga (white whale) and bones of the great sperm whales. My walk was interrupted by the sound of a plane, although no pilot was expected to fly in that weather. I hurried back to the village and as I approached saw a seaplane on the lagoon behind the store.

Brown, the pilot, was on his way to Bethel and anxious to be leaving. Having picked up my bags at the store, Stranberg and I climbed over a pontoon and into the plane, Stranberg beside the pilot, and I behind him. The low clouds revealed only about 400 feet of mountainside, and we could see only a short distance in any direction.

We taxied into the wind. Suddenly we stopped. Brown turned, flung open the door and shouted, "Jump out! We are on a bar." Stranberg and I leaped out and, standing knee-deep in water, shoved the pontoons with all our might while the engine roared. As the plane moved, it threw a sheet of water over us. After a few seconds of struggle the plane was freed and as it circled down the lagoon to land, Stranberg and I waded ashore through waist-deep water.

Again boarding the plane, we headed once more into the wind. Airborne we kept to the shoreline and the ship bucked and bounced as we approached the mountains. In just a few minutes we sighted the Kuskokwim and followed it. The weather began to clear. An hour and a half after our take-off we taxied up to Brown's hangar in Bethel.

On shore Mrs. Heron, the village nurse, greeted me breathlessly. She had patients I *must* see. We visited a native with a tubercular hip of long standing, and she related in minute detail her method of treatment. I postponed her other "emergencies." At the store I obtained dry socks and at the roadhouse found my credit good for a meal. After that I felt much better.

In a short time I returned to the plane and pilot Brown arrived a few minutes later. Soon we landed on the river at my door without further adventure.

I was very glad to be home from my first medical call.

My unexpected and hurried departure from Akiak had placed Virginia in an awkward position. She was left with the few groceries we purchased on our arrival, and she and our small son were alone in a primitive village where as yet she had not made any acquaintances. The food would suffice unless I remained away for more than a short time. Unlike our home in the States, here she had no telephone, no electricity, no lights, no woodpile and only water from the river. That was so muddy that each three-gallon bucket we had thus far boiled on the stove left almost an inch of mud on the bottom of the pail. But if she worried about her situation she was not long in suspense, for there came a knock at the door and there stood two serious-faced Eskimo men, who brushed her aside and entered the house. They marched past her, through the almost empty livingroom, into the little kitchen which they inspected at a glance, then vanished through the back door into the shed beyond and continued out of sight.

Virginia did not know what to expect, but she was not the type to be frightened. She simply waited. The men returned shortly, bringing armloads of wood, then buckets of water from the river, and when there was no more to do they faced her. Virginia was at a loss for words but broke the silence to ask how much she owed them. "Nothing," they replied. "The Doctor is gone and some one must look after you." Assured there was nothing further they could do they took their leave, and until my return she lacked for nothing by way of aid for her chores.

Feeding time for a young Virginia Lee George.

Alaskan Natives

Our work with the Alaskan natives was not limited to the Eskimos but included Indians and a few Laplanders who lived in the area. The Eskimos lived on the coast and the lower river, the Indians upriver and in the interior. The Laplanders lived among the Eskimos and were married to Eskimo women. In accordance with the custom of the whites who married native women, the children were considered white; when Laplanders married Eskimos their womenfolk and families became Laplanders.

Indians and Eskimos did not associate with one another. They were traditional enemies and the Eskimos feared the Indians—perhaps the Indians feared the Eskimos, if ever an Indian feared any person alive, which I have always doubted.

Akiak was approximately 80 miles upriver from the Bering Sea, and Eskimo villages dotted both banks—miles apart, as environment dictated. Coastward there were many villages in the tundra. While each was small in size, seldom numbering more than 150 persons each in my district, there were all told about 3,000 whites and natives scattered over the 600-mile length of river. Akiak was an old village and one that had felt the impact of the white man longest. It had many log structures and the natives were housed in them.

All except the very old natives could speak English. There were exceptions, such as the natives along the coast of the Bering Sea and those living on the tundra, far back from the river. They were very primitive and still lived as Eskimos had for centuries past. Their houses were of sticks and sod.

There has been much speculation as to the origin of the Eskimos. It was the observation of an old sailor that stimulated my interest in the question. He spoke as an authority, saying they were Mongols, and spoke of the "Mongolian spot" which he said was to be seen on the back of all Mongolian newborn. I looked for it and, to my surprise, found it. It appeared as a powder-blue spot, varying from the size of a dime to larger, located over the coccyx of the baby. It usually disappeared within a few weeks, although it sometimes persisted throughout adult life. While usually confined to the back I saw it on all parts of the body, even the forehead and face. It sometimes appeared when the person looked to be of another race, whether mixed with white or Indian, and always indicated the Mongol strain. With my interest so kindled, I looked for other proofs of their Asiatic origin and found them in such number I was convinced.

A newborn boy was welcomed and given the name of the last departed male of his village, for the spirit that departed at death entered the infant at birth, according to their belief. A girl was less welcome but was given the name of the last departed female. If she were not wanted or if she were one of twins, which was considered very unlucky, she did not survive. Eskimo children grew up in a child's paradise. There was no punishment, no spankings at all. They were pampered and spoiled, for no grownup would want to spank a child who might have been his own father or grandfather. Boys were taught hunting, fishing, how to make bows, arrows, spears, traps, kayaks and in general the art of living in a desolate land. The girls learned to prepare food, gather roots and make clothing for the family. Marriage customs differed much in the various localities and with the influence of missionaries and teachers. So far as we were aware, they had adopted the church code and seemed to live by it. We seldom heard of a broken marriage. Each village acknowledged a head man or chief whose authority seemed unquestioned. Many villages also had a council of elders and so maintained an orderly existence.

Seasons probably influenced the natives more than anything. In the spring the men yearned for the hills where they hunted and trapped. Ducks, geese and other fowl and game were plentiful and living was pleasant. Later, with the disappearance of the snow and ice from the river, the salmon came and each family went to its customary fishing ground. With nets the men caught salmon by the thousands, while the womenfolk cleaned and dried them. Summertime was a happy but busy season.

With the fall winds and the first snows the woods rang with the sound of axes and saws cutting spruce and birch, which were then made into rafts and floated down to the villages. Some of the logs were used for fire wood; others were sawed into boards. The village rang with merry voices and noises as buildings, boats and sleds underwent repair. Dogs set up a continual din as if excited about the approaching winter. The pounding and other evidences of village activity continued until far into the night and began again with the dawn. Poling boats powered by outboard motors skimmed up and down the river, sounding for all the world like a vast swarm of overgrown mosquitoes. Snowflakes filled the air and covered the ground, hiding all the sordid rubbish scattered about, and the village came to resemble a fairyland.

We had been in the village only a few weeks when two native men called on me. I observed they were intelligent and from their attitude sensed they had something important to talk over with me. One, Willie Kesuylie, who I later learned was the village chief, inquired if it was true I was to travel up and downriver. When I replied in the affirmative, he said, "You will understand why we dress so," pointing to their fur clothing, "when you have been here a year or two. One freezes so quickly, and then it is too late."

They were looking at my warm woolen clothing. He continued, "The reindeer have heavy fur at some periods of the year and light at others; fawn skins, young reindeer and squirrel skins are not warm and they tear easily. They are used more for dress and women's and children's clothing. Heavy winter fur makes better winter clothing for men."

If not entirely convinced then, I soon became so when in the first real cold weather I had to cross the river on the new ice. I put on my warm clothing and, while the distance was but a mile, I noticed my legs became very cold above my boots and below my Seattle-made, canvas kushbuck, or parka, and when later my legs became painful I looked at them and found the skin a bright red. That night I could not bear the bedcovers to touch my knees. Already I had frostbite, and the winter had hardly begun. I resolved to follow Willie's advice and get proper clothing.

The chance came when Willie asked to borrow my rifle. I had purchased a new 30-06 caliber Remington repeating rifle before leaving Seattle and I prized it greatly. I had no intention of lending it to anyone. Willie had interrupted my work, for I was on the riverbank clearing a landing strip for planes that must come to Akiak. The north wind tugged at my clothing and I shivered, while Willie stood before me in a new reindeer parka looking very comfortable. The more I looked the more my interest grew in his warm parka and the less in my beautiful new rifle. I suggested a trade. This was impractical for, though Willie was big for an Eskimo, he was smaller than me, and besides he needed it. He suggested he make one for me, and I agreed. It would take five new reindeer skins, wolf and wolverine for the collar, and otter for the bottom. I agreed to pay any difference there might be in event the rifle was not of equal value. I had one other thought about the terms of such a trade. I was still a cheechacker and I had an idea there was an all-year open season on this particular specimen. My idea was to find if an Eskimo would cheat when given the opportunity.

Daily the weather grew more cold and disagreeable, and weeks went by. I would see the natives in their warm clothing and wish for mine. In time my parka was finished and Willie delivered it with pride. I slipped it over my head, my arms into the sleeves. The parka was a work of art, and I no longer regretted the loss of my rifle. The hair was long, soft and dark brown, perfectly matched. My face peered through the hood. Soft black wolverine fur touched my skin. Willie explained that neither snow nor ice would stick to it. Wolf fur completed the ruff and this fur was long and soft, too. This came from the scruff of the neck of the wolf and was the finest of the whole hide. It was perfect in every detail, even to the black wolverine tail attached to the back just like Willie's. This was to keep the Devil away. Half-whites wore parkas with tails that were half white and half black, and I was surprised that mine was not all white. The hem was complete with otter fur all the way round. To say the least, I was very happy with my parka, and when Willie said I still owed him $20 I paid, knowing he had been fair with me.

In the years following I do not recall finding a dishonest Eskimo. As children they seemed extremely well-behaved and fun-loving. They played at their native games and were fond of mimicking the grownups. One morning I saw a boy with an apple box and a string. Apparently it was his outboard motorboat, for he would wind the string around the back of the box, then pull it quickly several times, attempting to start the motor. Then he would straighten up and loose a barrage of profanity, in exact duplication of a white man starting his outboard motor.

They worked, too. When the ground became white with snow, children hauled driftwood from the beach. I watched two boys of six or seven years load a sled to which two dogs were hitched. When the sled was loaded, they yelled "mush!" and the dogs pulled with all their might, toenails making long slashes in the snow, but the sled did not move until the boys dived at the sled handles with the enthusiasm of football tackles. The dogs threw themselves against their harness and the sled moved, slowly at first, then at a steady pace, the dogs pulling, the boys pushing their utmost.

The Eskimos, we thought, were treated very well, not to say generously, by the government. Everything offered was for their benefit and was free of charge. The trouble was they came to expect this and to demand more. The natives' first contact with white men had been with the Russians, whom they found to be extremely cruel. Their name for a white man is "cossack." As mentioned earlier, it had been 50 years since the first American missionaries arrived in Alaska—the Moravian missionaries who established a mission on the Kuskokwim. Other denominations arrived elsewhere in the Alaska Territory, and each respected the territory of the other.

More recently the government came, established schools and hospitals and furnished medical care, brought in reindeer and looked after the natives. Following the sale of Alaska by Russia the Eskimos were given equal citizenship and rights with the whites. The land was not taken from them as was that of the Indians in the States. We thought them fortunate indeed.

With all the services given them, the native way of living underwent gradual change. They desired the articles they saw in the stores and homes of the whites, and their reaction was resentment that the government did not provide more. Sometimes they thought it was I who withheld the good things from them and try as I would I could not convince them I could do no more.

Christmas card sent in 1936 to the Georges by the Corthell family; Corthell was the doctor at Mountain Village.

Kuskokwim Life

The white population of our village consisted of four adults and two children. "White Akiak," the village across the river, had three white families, the trader, the teacher, a few Laplanders and the families of whites married to natives. Most native villages had only the teacher; some had traders also. Bethel, 40 miles downriver, had a greater number of whites. McGrath, 500 miles upriver, had a few white families, as did the scattered mining camps, Nyac (New York Alaska Corporation), Iditarod, Ruby, Takotna, Ophir, and Flat. Our white community was scattered over almost a 1,000 miles, and consisted of only a few families.

However, we were a community and felt neighborly with one another. News was carried by the ham radio operators, bush pilots, and travelers. Each helped the other in times of trouble and rejoiced with each other in times of good fortune. The bonds of friendship were strong, and when a member of the community fell ill or met with disaster all hastened to give aid, and many times a generous purse was made to send the ailing one for hospital care or to restore his business or grubstake.

We were anxious on arriving to know something of those with whom we were to work and play. So, when Mrs. Heron, the village nurse at Bethel, requested that I see a number of sick natives there I accepted the teacher's offer to ride down the river in his motorboat. I believed that Mrs. Heron could teach me something about the natives, and I could also learn something of Alaskan social life.

The new territorial school in Bethel was to be formally dedicated that night. My informer told me that only whites would attend and that after the program there would be a pie and cake supper. The money obtained from the sale of the pies and cakes was to apply toward the purchase of a piano for the school. All the whites from far and near were gathered when we arrived. I was rather confused to see that at least half the women were natives; I was yet to learn that all dependents of whites were classed as whites, regardless of color.

While waiting for the auction to begin, I took stock of my new associates. When I asked my neighbor their occupations, he remarked: "In Alaska, don't attempt to guess a man's alma mater by the patches on his pants." As I added them up, there were four school teachers, two mining superintendents, eight airplane pilots, two artists who had navigated Alaska's waterways, four ship's officers, two radio operators, two doctors (visitors) besides myself, a dentist, several miners, prospectors and traders. I wondered if one would have met in any university club a comparable group whose work was more important to their community.

About 50 persons were present. So many cakes had been contributed that some men had to buy more than one. Bill Hurst, a big, good-natured fellow, auctioneered and the audience chimed in with many remarks and much advice. The 30 pies and cakes brought more than $200. The highest bid was $25 which Captain Carlson paid for the cake made by the new territorial teacher.

Mrs. Heron conducted her clinic in one room of her dwelling. She knew all the patients and called them by their Eskimo names. At the close of the clinic hours Mrs. Heron and I went into the village and visited every home. Those complaining were given medicines or whatever they seemed to be in need of. Often they already had a number of bottles or boxes of medicine, to which they added those we gave them. I wondered if they did not expect the white man's medicines to act by charming the spirits as all bottles and boxes appeared to be full and unused. In every house Mrs. Heron knew the history of the occupants. After inspecting the last native house I returned to the roadhouse and later back to Akiak. In a remarkably short time I had seen and learned much about native life that I needed to know, and it stood me in good stead for the work before me.

One morning a native girl came to tell us there were ptarmigan nearby. I went and saw them in the willows beside the river where they looked like clumps of snow on the dark branches. I had heard so much about this bird, how it was excellent food and that prospectors and natives procured it so easily, that I was anxious to obtain a few for our table. Mounted on skis to better traverse the soft deep snow, I hurried across the river. I found the birds very difficult to see, 30 for they were white as the snow itself—camouflaged perfectly. To make hunting more difficult they flew while I was a long distance away. I shot once, but the distance was too great. To make progress easier in the brush and tree-covered landscape I removed my skis and soon came upon the main group of birds sitting in the snow. They were indistinguishable in my gunsight until they flew up, emitting a cry that sounded as if they were mocking and laughing at me. "Waugh, ha, ha, har," they called as they disappeared in another snowdrift. Though I followed I could not get close enough for a shot. Once a dog sled passed near them without their seeming to notice. At last I gave up and went home empty-handed. I concluded I had a lot to learn about Alaska.

The following Sunday I was asked to speak at the morning services of the native church. On entering the little white church I saw the men sitting on the right and the women on the left of the central aisle, which is the custom in all Moravian churches. As the organ sounded the voices of the natives were lifted in song, not one word of which I understood although the hymn was a familiar one. A prayer was offered by one of the men; then I was introduced to the congregation. I spoke a few words, pausing now and then while the native interpreter translated. I explained briefly my presence in the village and asked their cooperation in combating disease. I hoped that my words would be taken seriously.

Since my experience with the pilot Winchell, I knew I might expect a call at any time and was determined to have a safe landing field if I had to fly. I went through the village, stopping at each house, and requested the men to help me clear the beach, then strewn with driftwood. Willie Kesuylie, the village headman or chief, appeared with five or six men and boys and we all worked until noon. For the next two days I continued with the work alone and had the field well cleared. The wood was piled neatly at the edge of the riverbank, convenient for winter firewood. After the clearing was completed, I levelled the sand dunes and marked the field with white flags made from a roll of wide gauze from the medical supplies.

The skill and judgment of the bush pilots who fly in Alaska continually amazed us. We thought them the world's finest, and would never hesitate to fly anywhere with one of them. They were a queer lot, independent as could be. Only they knew when they would fly. A weather report might be obtained, if that were possible, then the pilot would leisurely draw on his warm boots, step out-of-doors, look into the air, lift his head, sniff a time or two; then if he went back inside the house and kicked off his boots and sat down we knew there would be no flying, at least for the present.

We found life in Alaska regulated by the seasons. Beginning with October there were no mail contracts because freeze-up was expected. In April break-up was due and again there was no regular mail schedule. During the intervening periods the mail was given to any pilot visiting Anchorage who might happen along our way.

The September days in Alaska were beautiful, the sunsets colorful beyond description, twilight more prolonged than farther south, its hues more delicate, and we came to look forward to the evenings with pleasure. As we spent hours admiring the slowly changing tints in the clouds and sky, we enjoyed the lazy hum of the river life about us, the rustic village surrounded by willows interspersed with cottonwood and black spruce, the children at play, the poling boats as they glided on the mirrored surface of the river, and the last rose tint painting the Reindeer Mountains on the far horizon. Then, as the sun dropped from sight, the malamute chorus would fill the air.

When we first arrived in the village, we were greatly disturbed by this continuous nightly wailing of the dogs. They howled in concert, not like any dogs we had heard before and not like the howl of the wolves. The natives called it singing, and perhaps that is the word for it. It began as a wail that we would often mistake for the cry of a small child, but not for long; the note would be swelled by the voices of hundreds of canine comrades. During the day the dogs were fairly quiet. Though a concert at mid-day would announce the first hum of an airplane long before it was audible to us. They howled at sunset, then again at the night moon. Often as the dogs set up their din at night I would see the northern sky crossed by streamers of emerald light resembling a row of illuminated fountains spouting spray to varying heights into the sky, with a green glow in the background as if a bank of clouds lay over the dark of the land. This Aurora Borealis was a beautiful and awesome sight.

With winter coming, with temperatures sometimes falling to 40° below, we had to prepare ourselves. The furnace—made of an oil drum—needed repair, and we found fixing it quite a simple matter. A second set of windowpanes required replacement. During the summer months they had been used to cover a small hotbed and, as a result, were badly weathered. The cement chimney had frozen and cracked. A wall of dirt outside the foundation of the house had been washed away by the spring floods. There was also far too much ventilation in our outdoor toilet, and a garbage pit had to be constructed.

By the last week in October morning fog lay upon the river. The natives warned that ice would come soon. One morning I met a native and greeted him, "It's foggy again this morning. The ice will come now, I suppose."

"No, too much fog. Ice come when it is clear," he replied.

November really brought the "freeze-up," which changes the entire way of living in Alaska. It was hard for us to imagine the river, with its swift mile-wide current, covered with ice. Each morning the weather grew noticeably colder; the water receded from the riverbanks and the boats remaining were either anchored far from shore or drawn high up on the beach. Each day it became more difficult to fill our water buckets.

The sun peered over the Reindeer Mountains about nine o'clock and crossed low over the southern sky. The sky was clear. Trees and buildings were covered with frost. The distant mountains took on odd shapes, appearing flat-topped or even as shelves upon pedestals. Door hinges creaked loudly. Long needles of frost covered the storm porch, the walls of the back room, even those of the basement, as well as the double glassed windows of our living room. The snow was crunchy underfoot. The natives, usually anxious to take us across the river for their 50-cent fee, no longer wanted to be on the river, saying they feared to be marooned on the opposite shore.

Mrs. Bird, the school teacher at Tuluaksak, 25 miles upriver, had been awaiting the arrival of a special hair preparation ordered for the new beauty parlor at Bethel. The whole river populace listened for news of its arrival. At last it came. The amateur radio broadcast the news. Saturday arrived and we all watched the river for the Birds' little speedboat. We saw them pass and hours later their return. They did not stop for fear of the ice. Mrs. Bird had traveled 130 miles in an open riverboat for her first permanent in seven years, only to return to her village where there were but two white men, her husband and the trader, and the natives to admire her hairdo.

On November 9th we looked out upon a new river. From shore to shore large pieces of ice moved. It was the beginning of the freeze-up, the great event we heard discussed wherever sourdough met sourdough. The cakes of floating ice were beautiful: white on top, green and blue in the shadows. They crushed and ground at each other and sometimes shoved onto shore, but they kept up their hurried pace day and night, growing larger each day. When we looked out on the morning of the 12th, they did not move at all. This meant the lower river and bay were full of ice, which had jammed the river and frozen downstream. With the temperature at zero the new ice tied the whole together more and more firmly. Within a day the ice along the river shore was two inches thick. Open spaces between showed black, swift water.

The freeze-up, which ushered in the winter season, called for an entirely different mode of life, travel, work and dress. I began seeing patients with new complaints. They came showing red and black blotches on their cheeks and legs, which at first alarmed me until I realized they were the results of frostbite. They occurred on the legs of the native girls who liked to wear thin stockings instead of their accustomed fur clothing. Many times natives came with a finger white as an icicle and just as cold, which answered a question I'd often pondered: did the Eskimos ever freeze?

Winter was far from unpleasant. In fact, we found ourselves enjoying it. Almost daily the sky filled with falling snowflakes, which made a fairyland of the willow forest. It seemed never to stop and, as the cold continued, we felt earth tremors unlike any we could recall. They seemed to come from the east and were repeated at intervals, sometimes causing the dishes to rattle in the cupboards. I was reminded of a railroad switchyard with big engines moving cars around and freight trains rattling by just outside. Sometimes there would be a sharp report. We agreed it could be ice breaking on the big lakes or it might be a series of small earthquakes, perhaps originating in the volcanic region somewhere in the Aleutian chain.

The cold taught us other things—why the storm door, for one. When leaving the house we would open the door and close it behind us. Then we would hurriedly open and close the outside door. If this were not done, a cloud of white fog formed immediately and rolled onto the floor into the room. The cold was intense. The nails stood out white, every one holding the firtex to the wall showing, and when we touched them we found them covered with frost crystals. We were comfortable after we obtained furs and dressed as the natives did. We could not have existed otherwise.

One day I went into the village. The thermometer read 50° below. The willows were beautiful, all soft and gray. Each tin stovepipe sent up billowing clouds of steamy white smoke. I needed to unlock a padlock on one of the buildings and as I shed my mittens for a hurried turn of the key in the lock I jerked violently back as if I had suddenly been shocked by an electric current. Then, feeling embarrassed, I looked about to see if anyone had seen me and, satisfying myself no one had I tried again to turn the key and felt the same painful sensation as before. I could not explain why the cold caused steel to affect me in such a manner, but I did not touch the lock again with bare fingers.

The mittens I wore were attached to a cord which circled my neck and each was suspended at sleeve's length. I was extremely proud of them for they had been given me by an appreciative patient. They were of heavy moose skin and the cord was hand-spun wool. I found the reason for the cord. When one must shed a mitten in the extreme cold, hands become numb almost immediately and without the assistance of the cord it was impossible to replace one's hand in the mitten.

Getting water was quite an experience. I had thought our water supply was dependable when I went 100 yards from shore and cut our water hole. The natives also did this, but theirs was a 100 feet or so upriver. One morning as I chopped to remove the new ice, I found only the frozen river bottom. I went far out, still in front of our house. I climbed down the bank to where the water was normally found, bucket in one hand, axe in the other, looked until I could distinguish our old water hole by the pole sticking up through the ice, then prepared for the long slide as I stepped onto the slanting ice and whizzed perilously to the level of the main river. I made sure I was far enough out so that this hole would suffice for the winter. I made the opening three or more feet square at the top and chopped for a long time before I reached water, and then it came through like a gusher due to the tremendous pressure of the weight of the ice. I was covered by the water which immediately became ice as it spewed into the air. Again I placed the pole so that I might find the water hole in the future. Each time I went for water thereafter I had to chop more ice. Eventually the natives gave up trying to keep their water hole open. The last ones I saw using it were dipping with a cup and it took them a long time to fill their sledload of containers. After that they used our water hole, much to our concern at times. It seemed that every dog team sighted our marker pole and headed for it as if it were the only tree for miles. The constant dipping and spilling of water built up a wall of ice all around the water hole and the snow blowing before the wind formed a drift around it. The splotches of blood that appeared on the yellowed ice from time to time might have been from a hemorrhaging native, but I always tried to think they were from a dog's foot from which a nail had been torn.

In the evenings Virginia knitted while I read. This was the land of the spiral sock. Such a sock, knitted to form a spiral, is without a heel. The wearer rotates it each time he puts it on so the heel is in a different spot each day. Sourdoughs found they wear longer than other styles and are able to make the entire sock wear out at the same time.

Each night groups of children came to visit us. They loved to look at magazines. They had learned to read, but all were too poor to subscribe to magazines or newspapers. We learned that a girl in the cabin next to ours was ill with tuberculosis. She had once been the star pupil at the native school. She begged for books from the school library until she was told they could not be loaned to her. She begged for our magazines when we had finished with them, but our supply was pitifully small. When we were ready for bed we learned to tell the youngsters, "You can go now," for they would not go otherwise; then they would lay down their books and depart. Seldom did our routine depart from this, and we learned to enjoy the long evenings.

One winter evening at dusk a large plane landed on our beach. It was Nat Brown with one of Saseen's Pilgrims, and as the passengers began to alight Saseen himself brought his other plane down. Each was a ten-passenger plane and they had Stranberg's miners aboard enroute from Goodnews to Anchorage. A fog had closed in and forced them to land on our beach. Seven of the men stayed in our dispensary. One of them was the discoverer of the Goodnews mining claims and was on his way out for his first look at the States in six years. They all carried sleeping bags; one of the first laws of survival in Alaska. Mr. Stranberg carried a gunnysack over his shoulder and, although it was only about half filled, it seemed a load for the huge man. He dropped his sack carelessly in a corner of the dispensary, then went across the river to spend the night with Carl Carlson. In the morning the weather cleared and they could leave. They marched to their plane, the men with their sleeping bags, Mr. Stranberg with his gunnysack. I snapped his picture, for Mr. Stranberg's sack contained his last cleanup, more than 100 pounds of platinum, valued at $67 an ounce—more than $100,000. It was a sum larger than I was accustomed to see lying around in a vacant, unlocked and unguarded house.

Alaskan Christmas and New Year

The weather moderated somewhat and the wind whipped the new-fallen snow into drifts. Virginia and I put on our skis and went for a Christmas tree. We took the trail that led away from the river toward the Yukon. We left the willows and soon found ourselves out on the tundra with black spruce forming glades, the snowfields trackless, no sign of life anywhere. We had thousands of trees to select from and we chose two, one for ourselves and one for the new baby just arrived in our little dispensary, which in emergency we had converted into a hospital.

This was our first Christmas in Alaska. What, we wondered, would it be like? We received cards and presents from everyone in the village, and from Bethel. Christmas here was just like everywhere. Almost every house had a tree and everyone gave and received presents. The school program was in the church and everyone in our village attended; even the bedfast tuberculars were carried in by their friends.

In east Akiak the celebration was in full swing. The visiting teacher boasted that the young people there had not slept since 5:00 a.m. the five days past. "Christmas is just the same here as it is in Fairbanks," he confided. "Everybody has a bottle." He included our helper's little eight-year-old brother and his playmates. "There is no more Canadian whiskey or second-grade. We've drunk it up. Now there is just straight whiskey, just as good mebee, only it don't taste so good goin' down."

The days had but a few hours of light, and seldom was there a clear day, nor were there bright, moonlit nights. Only occasionally did we catch a glimpse of the moon at all. With the cold weather we had expected to see the Northern Lights, but so far we had seen but a faint glow in the sky as if a delayed ray from the setting sun had lost its way among the clouds.

The last day of 1936 broke warm, with rain falling; the thermometer registered 38°. Mr. Carlson sent us an invitation to dinner at six that afternoon. We were happy at the thought, but nonetheless worried. Many patches of bare ground and yellow grass had appeared, and the water ran knee-deep over the ice on both sides of the river. Virginia and I felt the occasion called for us to resurrect our best clothing. It had been months since we placed them in mothballs. On second thought, we decided against this, feeling that the others might not dress up and we did not want to seem out of place.

The night was dark and we found our flashlight batteries no longer dependable. I took an old lantern and filled it with kerosene, trimmed the wick and lighted it. I placed Paul on the sled and we set out. Virginia led the way, lantern in hand. The rain beat down, the wind blew a gale and the slush made footing uncertain. We began our descent of the riverbank uncertainly; then the wind extinguished our light. Leaving Virginia and Paul in the rain, I returned for the questionable flashlight. We again faced the weather and were soon on the river. The water running on the ice reached our knees. One sled runner dropped through the snow crust and the sled turned over and at the same time the light failed, leaving us in utter darkness. Frantically, I groped for Paul and found him sprawled in the slush. It seemed foolish to continue when we were so wet. We retraced our steps.

"They will think we are cheechackers," mused Virginia as she closed the door against the storm. We wondered if the ice ever broke up in midwinter when the weather became so mild. We concluded the river had been frozen so long it would not likely break up there.

Virginia's remark rankled us both. "They will think us cheechackers" will they? We changed into dry clothing, our best, and I faced the storm again, this time in search of a native. To my relief, I was able to hire one with his sled and dogs. We placed Virginia and Paul on the sled while the driver and I ran beside it. The sled runners would drop out of sight and the dogs wallowed to their bellies in the slush, but we arrived at our host's trading post, though an hour late. Mr. Carlson had a turkey, which had been sent from the States, and Gyda had prepared a wonderful dinner. Afterward Carlson brought out whiskey and soda which we sipped while he played his favorite classical records on a fine Victrola. It seemed no time at all until we heard the sound of guns coming from the opposite village. The natives were announcing the New Year. They made it a noisy celebration and "White Akiak" joined in the fun. With the return of silence our driver appeared, and reluctantly we took our departure. We had had a wonderful time.

Public Health

My official designation was "traveling physician," and my duties as mentioned earlier were to care first for the health of the Alaskan natives, and then for the whites, so long as it did not interfere with my care of the former. My salary was $3,000 per year—half of this to come from the Department of the Interior, the other half from the white population. I later learned that I had a travel allowance and one for drugs and medical supplies.

I was fortunate that two nurses lived in Bethel: Mrs. Heron and Mrs. Hurst, a traveling nurse. Both were familiar with the area, and their presence reassured me as Virginia and I established ourselves in our Akiak quarters and prepared for the traveling I would be required to do.

I decided upon routine immunization for all communicable diseases that there were serums for. I also had to be in readiness for emergencies, be they medical or epidemic in nature. Mrs. Hurst and I visited all the area, going from village to village, vaccinating the children and caring for the sick. In epidemics we hurried to the scene by whatever means of transportation was available. Fortunately most villages were miles apart, which made the spread of contagious diseases more easily controlled. Meantime we were becoming more acquainted with the natives and they with us. We were handicapped because there was no established method of communication or transportation. In the summer, I could use poling boats on the river; in the winter I had to depend on dogsled. I might use a plane if one were available, but flying to remote villages, in winter blizzards, was uncertain at best. The public health of such a large area was quite a chore for one traveling nurse and me.

With the knowledge that there had been medical care for the area for the greater part of 50 years I expected the natives to be pretty well acquainted with modern medicine, and that the native superstitions about medicine men had been replaced by modern ideas. I soon found I was badly mistaken. However, I hardly gave it serious thought, thinking my background had prepared me for just such a situation.

As a small boy I had grown up on the Kiowa Indian reservation. I thought I understood primitive natives pretty well, but I soon learned that the Alaska natives were an entirely different breed. Their ancient superstitions and traditions, so closely intertwined with the hazards of their daily lives, had changed little because of white contact. Theirs was a world filled with invisible evil spirits. These spirits might appear in visible form (sometimes like men, but mostly like spooks); they walked in the air; they lurked in sea and storm; they seized human beings with dreadful consequences; they produced misfortune. Fear, in imagination as in reality, haunted the people all the time. The Eskimos lived in a terribly frightening world.

I soon realized how serious the natives were in their beliefs, and did not attempt to disregard their ideas. Nor did I think I could dispel their thinking merely by reasoning with them. To the natives we were naive newcomers, lacking in experience and intelligence. This, I concluded, was why after 50 years' association with white doctors and missionaries the Kuskokwim natives had changed their views little if at all.

The natives had their own theories of medicine. The shaman, or medicine man, had great power to protect his people from hostile demons. He soothed the spirits that sent the storms and the unbearable cold, and placated the invisible powers that controlled the game on the land and the animals of the sea. He journeyed to the moon or the bottom of the sea to consult the good spirits and obtain advice that is not obtainable by ordinary men. He argued with the evil spirits, and restored any soul that an evil spirit had stolen and hidden.

The shaman derived his power from a spirit from below, and he could command both good and evil spirits. He could send a spirit into a man's body to throw an offending spirit out. Just as readily he could send a bad spirit into the body of an enemy or anyone refusing to do his bidding. So convinced of the shaman's power were the people that they would do his bidding without question. He had undisputed control and was greatly feared.

The shaman always demanded payment for his services in advance, therefore running no risk of not getting paid in case the patient did not recover. He did not demand money, but rather articles that he might need. If the patient recovered he paid as long as he lived. The shaman could come and ask for fish, dogs, a sled or net, spears, guns, clothing, house or wife. If the patient refused the shaman might send the evil spirit that caused the illness to return to his body to kill him. In-frequently one went too far and would be forced to flee from the village or be killed.

I saw little evidence of actual medical or surgical treatment of patients by the shamans other than the emergency treatment given persons accidently caught by the crushing ice or by the terrific cold. Amputations had then been sudden and complete by the use of an axe or knife. I once was called to treat a native at one of the lower Kuskokwim villages for pleuritic chest pain and found evidence of cupping or bloodletting. John Igwak, one of the medicine men in Akiak, called for my assistance. He requested "stopping medicine." I learned he had brewed up a batch of "opening medicine" for himself and for some of his patients, with the result the diarrhea produced was so severe that they were passing blood. I told John he was just too powerful as a medicine man. I gave him a supply of paregoric that soon accomplished the desired results and no doubt restored his confidence in me as a shaman. It was the custom in these tundra villages to remain indoors for days or weeks at a time waiting the passing of a severe storm. Then when they could leave the igloo they would take a huge dose of castor oil. I could believe the story in part as I found large stores of this cathartic in practically every school dispensary; sometimes it was the only medicine on hand. Yet for some shamans I had a great respect. In applied psychology they were expert. As I have related, the shamans dealt with the causative element of Eskimo disease, the bad spirits that live in the world below, and, according to the Eskimo theory, who are responsible for the ills of their race. The Eskimo shaman's duty was to placate, frighten, or otherwise protect the Eskimos from these spirits.

It was through accident I came upon a true situation relating to a shaman and his patients, and instead of lessening my regard for the medicine man, it elevated it considerably. I was visiting with an Eskimo transplanted to the States many years ago. He was past middle age and was a highly educated man doing work at an atomic reactor installation. We were talking of Alaska and I found he had been born within the Arctic Circle. Old memories returned, and he talked of his grandfather who was a shaman. He said he had often watched his grandfather as a child, as he performed his medicinal rites. Grandfather would dress in his accoutrements (to us, surgical gowns and masks), which were to scare the devil and evil spirits. He would have a pit dug in the ground or ice.

Standing before the pit he would dangle a string of seed pods which made a soft rattling sound. Down into the pit he would disappear before the eyes of all. He had gone to the world below, to the land of evil spirits to bargain; eventually he reappeared.

The old Eskimo sat relating his story, then came the answer. "I have thought much of this," he finally remarked. "It was the best example of mass hypnosis ever performed, for undoubtedly this was the answer." I had to agree and with this, I elevate my primitive competitor to his proper station as a psychologist at the top of his profession.

The bush pilot Saseen.

General Practice

I soon realized my duties extended far beyond "public health." It was medicine in the raw and it encompassed the whole field of practice. In the States I had become accustomed to specialization, for there the physician in ordinary general practice could rely on help from laboratories, hospitals, consultants and a host of aides. Here were none of these; I had to do with what we had. Nothing was planned; things just happened. But it was an exciting life and we would not have traded our lot for any other.

I had barely returned from Platinum when a plane brought a patient from an upriver mining camp. She was an expectant mother, a mixture of Eskimo, Russian, Indian, Norwegian and other ancestry, who had a white husband. This was her second pregnancy and, since she had trouble with her first, she sought medical care for this one.

Her condition, toxemia of pregnancy, or eclampsia as it is called, is very serious and kills many even where the best of care is available. The woman needed to be hospitalized but there was no plane available, and besides, a storm was setting in. We had to care for her, so putting her to bed in the little dispensary, Virginia and I left Paul to the care of a native girl and gave our entire attention to the patient. Hoping to prevent a convulsion, I gave her a large dose of morphine. While Virginia busied herself with the patient, I attended the furnace in the basement. Interrupted by Virginia's calls, I hurried upstairs to see the patient in a convulsion. She was almost black and her body shook as if by an electric current. Virginia was holding her and trying to force her teeth apart to prevent her biting her tongue or strangling. Finally we succeeded and got a piece of wood between her teeth. I gave a second injection of morphine while other convulsions followed; they were so severe that we expected each one to be her last. Someone brought the girl's mother, who looked at her daughter for a moment, then weeping, placed her arms around Virginia and said, "I will go. I do not understand this kind of sickness." The old lady, more native than white, no doubt thought her daughter possessed by an evil spirit.

Our patient had not expected her baby for another three weeks and was not in labor. Now, with severe eclampsia, it seemed to us her chances of survival were extremely poor.

Both Virginia and I kept watch over her and never left her side for a minute throughout the night. Almost helpless as we were, we could only trust to Providence. Meantime we did everything we knew to help her. The heavy sedation stilled the patient and all was quiet as we sat watching. Out in the village the dogs barked, rattled their chains, and now and then one ran loose, chain dragging. The wind rattled the window panes for all the world like a winter storm as it whistled in the eaves. Or was it the wicked spirits which shook the house and made the weird noises?

Dawn came at last and our native girl brought our breakfast. As we ate, our patient stirred and, still irrational, she berated me; she declared she would not have her baby. She cursed and swore and heaped abuse on us in various tongues, including English. She had a large profane vocabulary, and we were encouraged by this demonstration; she was very much alive. When she complained of abdominal pain, we hoped she might be going into labor, which she did. That was our only hope. We still had the problem of keeping her under sedation sufficient to prevent convulsions yet not heavy enough to asphyxiate her or the infant. We exhausted the morphine supply from my medical kit, also the sodium amytal; then we resorted to chloral hydrate, which we found among the drugs there, though with misgivings. I had used it in the treatment of alcoholics, yet considered it a dangerous drug.

Again our patient complained of head pain, which grew rapidly more severe; another convulsion appeared imminent. Heroic measures were permissible, we felt. I read in an old medical book that I had found how in early days it was the practice to remove blood in order to reduce blood pressure in treatment of eclampsia. The book stated it was an old remedy and, like much of the medicine of the past, had long since been discarded. We hoped it might work this time and, while Virginia struggled to hold the patient's arm, I withdrew the blood, and as we did so the patient relaxed and fell asleep. Later, when a convulsion threatened, we repeated the treatment. This time, it failed us, and by mid-afternoon our patient was wildly delirious and all methods seemed of little avail. It appeared as if we were to lose our race with death, just as I had on my first call to Platinum. Our spirits fell lower and lower, though long since we had forgotten to care whether or not it would make any difference with the natives; we were concerned for the mother.

Our patient undoubtedly was made of good rubber, for she lived and had her baby alive and normal, and to our surprise became at once a jolly, carefree woman. She recalled nothing of her two-day delirium. Virginia and I were tired, but down inside we felt happy and thankful as we looked on the mother and babe. In the village the malamute chorus swelled telling of the setting of the sun and the end of another day. We should have been sleepy, but we were not, and Virginia insisted upon giving our patient nursing care, and did night-and-day thereafter.

This emergency had caught us unprepared and we did the only thing we knew. We placed a cot in the little house next door, which we used as a dispensary. Apparently this was a mistake, for word spread of our caring for this patient and we soon had our dispensary filled with patients, with four cots in all. We were handicapped by the lack not only of communication but also of transportation. For long periods no planes were available and the hospital for natives was too far away for dog team travel. So whenever plane transportation was not available we provided emergency hospitalization, entirely at our expense. For this our fabulous salary of $3,000 per year was hardly adequate. We made a request for money to care for these emergencies, but it was promptly denied. However, by nature, choice and training we had dedicated our lives to the care of the sick, and despite difficulties we continued to do so to the best of our ability.

One afternoon a native handed me a note. There was a sick man at the village of Quithlook (the name was officially changed to Kwethluk in 1938) and Mrs. Oman, the village teacher, asked that I come at once. Quithlook, I found, was on the river and about halfway to Bethel. Inquiring at the village, I found two young men who would take me in their poling boat, and we were soon on our way. The long, narrow boat, made for this river, was propelled by an outboard motor, and at first we made good time. But passing through a shallow slough to shorten the way, the propeller struck the mud and was torn off and lost. In the meantime I rowed to make some progress. It was almost sundown when we reached Quithlook. Mrs. Oman and an interpreter led me to the sick man, whom I found ill with pneumonia. There were others in the village who needed attention also, and I saw them all. By this time it was late and though Mrs. Oman asked me to stay, and though I should have known better, I decided we should return home. The trip upriver, in pitch darkness and still plagued with motor trouble—even fire—was far worse than the trip down, and it was long after midnight when we got home. The boys presented me with a bill for $20 for the 50-mile trip. At the time I had not the slightest idea how I was supposed to pay them. Later I learned I had a travel allowance for such calls.

Pilot Nat Brown stopped on our beach long enough to leave us a patient, Tony McDonald, whom he had picked up 300 miles upriver. Tony appeared to be a mighty sick man; we suspected a bowel obstruction, and in that event surgery was the only resort. Brown did not have time to take him to the hospital at Mountain Village just then but promised to stop the following day as he was enroute to Anchorage. Our patient was a trader whose post was on a tributary of Stony River, a hundred miles from where it flows into the Kuskokwim. His year's supply of goods came on the *Tupper*. At Bethel his goods had been transferred to the little river steamer *Langley*; from it they had been piled on the riverbank at the mouth of the Stony. McDonald needed to make two trips with small boats to get the goods to his store. At that time of year the ice was expected to begin to run in the upper waters of the Stony. So it was possible that illness might well spell disaster for him. Virginia and I set to work with a will to do what we could. Our treatment proved successful and he improved so much that when Brown appeared next day McDonald was able to fly home.

One afternoon the pilot Saseen landed on the beach and left us a native of Bethel with a broken shoulder. Since Saseen did a freighting business between Bethel and the mine at Bear Creek, he made as many trips as possible during the daylight hours. At dusk he stopped for the patient, returning him to Bethel. So far we had not met "Sas," as he was called. He had landed on our beach before this and I had been within a few feet of his plane, but he had always been in such a hurry he took off without looking our way or speaking. Virginia and I wondered at his behavior. We concluded he was one of those men who had been among the natives so long that he had become one of them.

46 On another occasion when Saseen was on our beach, a man dropped from the open cabin door carrying a bundle and hastened to our door. The man's face was gray, but not as gray as was the child he unwrapped before us. It was his little boy who had drunk coal oil thinking it cod liver oil, which Alaskan children considered a delicacy. Virginia and I set to

work on him at once and after several hours we sighed with relief to see his color improve and his shallow breathing return to normal.

A native arrived by boat from 50 miles downriver. He had a bullet hole in his foot. The rifle bullet was a large one and had torn the foot badly. We wished for anti-tetanus serum but had none. We cleaned the wound up and treated it as best we could, but in spite of this the foot became worse. It looked as if we would have to remove more of the foot, and we certainly were not equipped for that. At last, we prepared to operate, but before we could do so Saseen landed on the beach and we persuaded him to take the patient to the hospital at Mountain Village.

We looked for village natives to help carry the man to the plane, but the village seemed strangely deserted. We could not account for this. Usually a plane's arrival brought everyone out. We found the reason for the natives' absence was due to an old custom. Mrs. Sarri, a native, had died of tuberculosis two days before. Since the disease that carried her off was considered bad, the departed spirit would remain in the village for five days and everyone would have to keep indoors and out of sight. They were making every effort to avoid the spirit and the injury it would do them. The usual noise of children was absent until five days had passed; then the village swarmed with people at work and children at play. For lack of any help we placed the native on a stretcher and Virginia and I carried him to the plane.

Living in a primitive native village had its difficulties. Communication within our large district was far from adequate. There was no regular postal service for much of the year. As mentioned, we received letters when any pilot knowing he was going to the Kuskokwim River dropped into Anchorage. There he was given the mail pouches for the various villages; he merely flew low and tossed ours onto the beach close to our village, where anyone nearby picked up the pouch and took it to the post office operated by the trader.

One night I was aroused from sleep by a man who asked me to accompany him to his home. The house we entered appeared the cleanest and neatest I had seen. In the first room was an old man, evidently far gone with tuberculosis, but it was not for him I was called. In a little room to the rear of the main house sat a young woman in labor, fully dressed. She wanted to go to the "hospital" to have her baby. I did a hurried mental survey of the situation. Our dispensary was already full with two men and a woman in the one room, but I did not relish the idea of sitting for hours in that pitifully small room, which was without ventilation, listening to the hollow cough of the old man in the other room.

We managed to crowd in another cot and another screen to shield her from the view of the men in the dispensary. Even at best privacy was questionable. I learned that the patient had once worked in an Indian Affairs hospital and also at a mining camp, and that her husband was one of the best hunters, as well as one of the wealthiest natives in the village. Her mother was the village midwife, as we learned when she took her place at the side of her daughter, and both she and the daughter began pushing on the latter's abdomen. This was their method of childbirth. Virginia and I were greatly relieved when the mother returned to her home, leaving us to attend the delivery of her first granddaughter.

A little later in the night, when Virginia and I were busily engaged in the delivery of the woman's baby, a resounding thud startled us and we looked to see our miner, who occupied the cot to our right, climbing hastily back into bed. Apparently he had leaned so far from his cot in an attempt to see around the screen that he forgot all else and fell.

A native arrived from Quithlook with a note from Mrs. Oman saying the whole village was ill. Since the weather had changed, the river was frozen and snow was on the ground, I had to travel by dogsled—for the first time. I arranged for a dog team. It was Sunday and we started early, just as the sun came up over the Reindeer Hills. The team consisted of nine dogs. The leader, an Alaskan husky, resembled a big gray wolf. On his harness he had red tassels that danced over his neck and shoulders. He seemed fully aware of this and was very proud. His ears were short and lay sharply against his head; his shoulders were high and broad; his back was arched and his hips were small and low, giving him the appearance of being very strong.

Eight dogs were hitched in pairs behind the lead dog, separated by the main line which was attached to the sled. All were barking and tugging, so eager to be off that two men were required to hold them. The sled was fastened by rope to a post set in the ground, and the lead dog was held firmly by one native while the other brought the dogs one at a time and fastened their traces to the main line. The driver took his place behind the sled with one foot on the brake, a three-pronged, sawtooth-like iron, which was driven into the ice or snow when the driver put his weight on it. I hopped onto the sled and sat down, the sled and dogs were simultaneously released, and to the din of the hundreds of other dogs in the village, the shouts of the natives, the whine of sled runners on the hard snow, and the rasp of the foot brake, we plunged recklessly forward down the riverbank over the cakes of ice and out onto the smooth river, which was our course for the next few miles.

Our rate of travel amazed me. I hung onto the sled to avoid being tossed out as the sled careened from one ice hummock to another. The driver deftly guided the runners from his stand, one foot on a runner, the other on the brake, his hands clasped tightly on the sled handles as though they were the rudder on a ship. But after this first burst of speed, we slowed to a snail's pace. Suddenly we came to an abrupt halt that piled the whole team up when they caught the scent of some animal or other dog team that had been on the trail. A few words from the driver to the lead dog started him pulling the traces tight, showing how many of the team were facing the wrong way or were tangled in their harness. Some were able to fall into their accustomed places; others were assisted by the driver and again we were on our way with little time lost. Again and again one of the team attempted to stop but the lead dog, apparently impressed with his responsibility, appeared to share the driver's point of view. After his first mental lapse, he kept the traces tight so that any dog making a sudden stop was yanked by his harness and bounced over the ice until he gave up and again took his share of the load, this to the blistering insults heaped upon him by my driver.

After a few miles our way led over land on a narrow trail at a place where the river made a huge bend. This was called a portage and, as the riverbank was bare of snow, both the driver and I tugged with all our might assisting the dogs. Thereafter for several miles we traveled a grassy, partly snow-covered trail that wended its way through clumps of willow, cottonwood and black spruce. Eventually we came to the river again and went on over the windswept ice. A mile distant Quithlook village sprawled on the opposite bank. The lead dog pointed his nose into the air and howled a long "Ooh-Ooh," his breath, like escaping steam, trailing in the wind. He glanced back over his shoulders, first right then left, then with back arched, hackles bristling, and toenails clawing the ice, he fairly flew ahead to the accompaniment of the yelping dogs at his heels. The sled swung from side to side, striking snow hummocks and tipping dangerously, but my driver shared the excitement and using the sled handles prevented our overturning. As we approached the village of Quithlook, we were greeted by howls from every dog there, while the populace lined the river's bank. We did not stop until we were directly in front of the school.

Quithlook was a typical Eskimo village; no one knew just how old it was. The log houses were of one and two rooms with storm sheds for entrances. The village was picturesque, standing as it did along the river with its stilted food caches and two larger buildings at its center, a yellow-painted schoolhouse and a white church with steeple surmounted by a cross. The churchyard enclosed hundreds of white crosses, all of Russian design. There was no mistaking these people were of the Russian Orthodox faith.

Mrs. Oman was glad to see me and we went to visit those most ill. These seemed to have been poisoned, at least to have suffered a severe epidemic of gastritis or stomach complaint, for they had been vomiting and showed other symptoms of food poisoning. I soon found the answer. Only the day previous a tipnuk hole had been opened.

Tipnuk is made of fish parts obtained during the spring salmon run. The fish are cleaned and hung on willow racks, and, when dry, are gathered into bundles and stored for winter. The tipnuk is a side result. A hole is dug in the earth, three to four feet square and deep, and lined with grass and leaves. Into this is thrown the fish heads, entrails and other offal, to which are attracted millions of flies. When the hole is filled it is covered over with sticks, grass, leaves and then dirt. By mid-winter the tipnuk, as the contents of this hole is called, is ready for eating and the lid is removed. There is no need to notify or invite the natives to the feed; they all know of it by the smell. It is a jelly-like substance and is irresistible.

Mrs. Oman and I stepped discreetly around the open hole in the earth and continued our way through the village. We visited every house, and found much chicken pox, as many as six cases in some houses. A few of the people were ill with influenza, and there were the usual number with terminal tuberculosis. One girl had gangrenous stomatitis, a rare disease. Within a day, half of one cheek had sloughed away and the teeth were all visible. I suspected it would prove fatal. She was one of nine children of the village Russian Orthodox priest. I gave directions for treatment and care.

Thinking I should talk to the entire village not already bedfast, I asked one of the villagers to summon them to the schoolhouse by ringing the school bell. I was cautioned by the teacher that we were forbidden to interfere in any manner with the natives' religious beliefs. She feared my talk might infringe in some manner, I supposed.

When we had finished our inspection, we found the villagers waiting. All seats were filled and others stood around the wall or sat on the floor. I spoke a few words, then waited for my interpreter to pass it on to them. I tried to tell them how they might improve their health through improving their sanitary practices and led gradually to the point I wished to make, that of abandoning the practice of kissing the departed one, for it was the custom to file past the corpse one-by-one and to give a parting kiss. With the teacher's warning still in mind and mindful that anything I might say that contradicted their customs might well go unheeded, I felt that I could not proceed with too much caution and diplomacy. However, the thought of the grinning face of the girl I had just seen seemed too hideous for words, and I told them of the unsanitary practice and its dangers. I suggested that if they must continue the practice they place a pane of glass between or, better still, throw a kiss to the departed one. They seemed puzzled at this and the interpreter did not seem to grasp the idea. I felt I had failed in my message and that the old customs would most likely continue.

My story told, in silence unbroken, I stumbled down the aisle through the door into the clear, fresh air. No one knows how welcome the precious clean air is, I was thinking, but barely outside I walked squarely into a mother holding in her arms a baby whose body was covered with chickenpox pustules, full bloom. The mother had brought it out to hear my little health talk.

Having done all I could, I looked for my driver, but he had decided to remain in the village, saying his dogs were tired. I asked for someone to volunteer to return me to my village, and while the natives debated among themselves I accepted the teacher's invitation to her home where we enjoyed a meal of reindeer and potatoes. Soon a native appeared and announced that a team was ready. I hurried through the remainder of the meal, for the sky had grown dark and snow was falling in great gusts.

There were eight dogs, but they had just returned from fish camp and were already tired. The trail was heavy with fresh snow. They did not like the storm or to leave home. At any rate, they moved at a snail's gait. Both the driver and I ran beside the sled. It kept us somewhat warm and our thoughts occupied and seemed faster than riding; besides the dogs showed their disapproval by slowing to a crawl when we rode. We took all the portages, for it was shorter by miles. It meant lifting the sled to the bank and again lowering it to the ice. This was not so easy for us as the drop sometimes was 20 feet or more. The dogs had to be loosened from the sled, and there was always danger of their getting away. The native held the lead dog, leading him to the ice below, while I followed and fastened the tow line to a log frozen solidly in the ice. Then we lowered the sled by a rope looped around a tree, playing out the rope as the sled descended, and finally shoved the sled up behind the dogs and, taking great care they did not get away, attached the tow rope. Then, loosening the dogs, we were on our way again.

Somewhere we missed the trail. Darkness had fallen and it was difficult to see, especially when the trail left the river. Still our direction seemed correct and we kept on our way. Once, in the dark, the sled struck a log and turned over. The driver was running on the trail ahead. I righted the sled, groping in the dark to make certain my pack was still there, then hurried the dogs along as rapidly as I could. I was not alarmed at the prospect of a night in the storm for my clothing was warm and I had food for a meal or two at least. Nevertheless, we were pleased when we saw the broad Kuskokwim River and the lights of Akiak ahead.

We arrived home safely near midnight, but I found the house silent and empty. Virginia and baby Paul were nowhere about. The native village was dark. Only one thing filled my thoughts: I must find them! I recrossed the river and knocked at trader Carlson's door. Sure enough they were there. Gyda had taken the opportunity of my absence to invite them over and, as the storm worsened, had put them to bed, certain that I would not attempt to return that night.

The storm lasted for days with snow falling almost constantly. It filled the air and piled in drifts, transforming the landscape into a fairyland. At last this was the Alaska we had hoped to see.

I received a supply of vaccine and was anxious to immunize as many of the children as possible. I asked for someone to drive me to Bethel, and Noah Jackson, my near neighbor, volunteered. We set out with nine dogs and a tenth one he called a "loose leader," that is, a dog that runs ahead of the team and, by barking at the right time at the command of the driver, encourages the team to greater speed. I was surprised that our dogs were collies, and inquired of my driver the reason. He explained that so many persons were killed by malamutes that he used only collies, which he declared were not vicious. I was dressed in furs and we carried sleeping bags. As usual, we fairly flew the first 100 yards, then our team read the trail's signs, recognized that friends had traveled this way before them, and slowed to a walk. The wooden runners stuck to the wet snow, and my driver wished for steel runners. All sleds were built with wooden runners and were fitted with detachable steel strips that bolted over the wooden ones. The steel runners glided freely on wet snow; the wooden upon dry, cold snow. It seemed we always used the wrong runners, regardless of the type of snow we were on.

We followed the river trail where possible. It was longer, but better going than the portages. There was much water on the ice along the bank, but the ice in the middle of the river, though drier, was so rough (where the cakes had piled up) that mid-river travel was impossible most of the way, and we followed the wet trail along the river's edge already well marked by other travelers.

We had not gone far when we sighted another team coming toward us. When the teams noticed each other they broke into a dead run, and their barks were joined with shouts from both drivers. My driver was yelling, "Haw," meaning, "Turn right," though I thought it meant left. It made no difference. Brakes ground in snow and ice, but in the end the teams crashed head-on into each other and there was general pandemonium as eighteen dogs, two sleds and the drivers became one shouting, snarling mass.

The drivers had their dog chains, which were carried in the back of the sled, and went into action, swinging them in sharp circles around and around their heads while the flying ends clipped one dog after another. Then, as suddenly as it began, the fight ended. The teams were miraculously free. Here one dog whined, there another limped, but, wonder of wonders, none seemed badly injured. I had left the sled at the beginning of the fight, taking no chances of mixing with those howling, fighting demons.

As night approached, the welcome lights of Bethel could be seen. Yet before we arrived we met eight more dog teams, one after the other, and there followed eight fights out there in darkness on the water-flooded ice. Each time our team seemed to get the worst of it. I developed remarkable agility in sliding from the sled into a defensive position on the ice. As the last of the teams disappeared into the night, my driver looked after the departing shadows and mumbled to himself, "Bad dogs, beeg dogs." I made a resolution: When I traveled again I would have the "baddest, beegest" dogs I could find.

We arrived at the roadhouse an hour after nightfall and enjoyed the food set before us. That night I slept on a cot and shared the attic above the dining room with five others. This was evidence that I had been accepted as one of the regular Alaskans. During the night the wind rose to a gale, sweeping sheets of water before it. The rain pounded on the sheet-iron roof of the roadhouse and the tin stovepipe, which sounded quite near in the darkness. From time to time a tin can or barrel, propelled by the wind, went crashing through the village. To this symphony my fellow roommates and I fell asleep.

Next day I examined and vaccinated the territorial school children. Because of the mild weather we decided it best to return home. We made good time but by mid-afternoon the new ice would no longer support the sled and we tried to avoid the deeper bodies of water. Once the sled dropped through and turned over. I leaped from the sled and landed sprawling on the ice, managing to avoid going through, though I became very wet. My clothing of reindeer hide, while affording protection from the cold, when thoroughly wet became shapeless bags that dragged and flopped about me as I ran. For a time it snowed, then the snow turned to rain. I still had a little vaccine left and planned to go to another village, but my driver refused, saying the river had become too dangerous for travel, so we continued home.

A messenger brought word that the teacher at Tuluksak was calling. Akiak's native schoolteacher was one of those enthusiastic radio "hams" whose favorite entertainment, night after night, was sitting before a microphone talking with other hams in Alaska or the States. "C Q" was a call universally used to invite an answer, and it was in answer to a faint one that Akiak's teacher found himself in conversation in code with Mr. Bird, the teacher at Tuluksak. The latter's daughter had become ill and he feared she had appendicitis. He wanted help as soon as possible. I answered that I would start as soon as my driver would take me; meantime, treatment was prescribed.

It was Mr. Bird, I recalled well, who had the speedboat, and it was Mrs. Bird who had traveled so far for a hairdo.

Mr. Bird had made himself a sending and receiving set, but had no license to operate one, so had no schedules with other operators. He was very fortunate that he was heard, and especially to have made contact with the station he desired. Ordinarily, schedules were maintained only once daily.

I went to the home of my driver, Moses Jim, and told him I had to travel as soon as possible. Jim thought it unsafe to travel before morning. So in the morning I was out early, but it was 7:30 before Moses Jim began to harness his dogs. The thermometer registered eight above, much too warm to suit him. The sky was clear and a strong wind blew from the north. We followed the river, taking no shortcuts. Black ice indicated what had shortly before been open water, and here and there we skirted swift-running water. I recalled my native friends' cautioning words: "Learn, or life is short here in the North." I knew, that once a person goes through the ice his chances of getting out are few. I had heard some say that nobody had ever been recovered once the muddy waters of the Kuskokwim closed over him.

We followed the sandbars, the shallow parts of the river, wherever possible. Once or twice the ice "sang" as we passed. Moses Jim said there was danger even in following the bars, for often the current swept the sand away from under the ice so that only a shell remained, which might give way, causing team and driver to drop through into the swift, icy current.

Our lead dog selected the way. Both he and the driver were on the alert. Under the weight of a man the ice underfoot might drop into the water. The ice thus thawed was black. The lead dog appeared aware of this for he picked his way over the lighter-colored ice. Once he turned suddenly, trying to swing the team to one side, his toenails scratched long marks as he crouched low and dug in. Jim laughed, "He got scared." As we threaded between the various shades of ice, Moses Jim explained that during the preceding mild weather the ice became like so many lead pencils standing on end.

We reached Tuluksak at 10:00 a.m., just two and a half hours for the 25 miles. The girl had an acute appendix, as yet unruptured. We had to get her to the hospital at Mountain Village by plane as soon as possible. I left her propped in a sitting position with an ice bag on her tummy, and hurried to start for home. Moses Jim was worried for the temperature was rising, and the ice between Tuluksak and five miles below Bethel was regarded as the most dangerous of the entire Kuskokwim. Still it was imperative that we leave soon. It was

2:00 p.m. when we left Tuluksak and 4:00 when we arrived at Akiak, making a travel time of four and a half hours for the 50-mile round trip. The weather continued to moderate and rain began to fall while we were still on the river.

We got a message out and a plane was ordered for the sick girl, but the rain turned to sleet, and then, as darkness set in, to snow. We did not expect a plane in such foul weather. Fully an hour after dusk we were surprised to hear the hum of a motor and to see it land on the sandy airstrip we had used during the summer. The pilot turned and brought his plane back to the other end of the field, almost nosing the willows at the end, then expertly turned and was ready for another take-off. He tossed a mail sack to me and I recognized him as Bill Knox of Fairbanks. As I saw him give his instrument board a final check before taking off, I was peering up through swirling, snow-filled air trying to make out what manner of superman this was. He turned and peered in my direction. "I'd sure hate to have your job," I blurted. He straightened up and looked at me with a quizzical expression, and after a long time he replied, "I'd hate to have yours." Then the starter ground and the engine roared and, as the plane became only an orange glow from the flaming exhaust and disappeared altogether in the dark, I continued to ponder his remark. I guess it is all in a fellow's point of view. There I was sympathizing with him for having to fly around in the dark with only the reflection of the river ice, the willows, and his knowledge of the country between him and eternity. I suppose as he looked at me, standing there in the willows looking out at him, he was sympathizing with a poor human being spending his life alone in an Eskimo village, in such a remote country where there could be little or nothing to enjoy.

Yes, it's all in one's point of view, I concluded. Bill enjoyed his life; I enjoyed mine. And neither would have traded jobs with anyone in the world. Bill was late that night in returning to Fairbanks. He had taken time out to go to Tuluksak and pick up the teacher's child. He delivered her to the hospital at Mountain Village where she was operated on in time.

No wonder the Alaskans praised and respected these bush pilots who, as they say, "fly by the seat of their pants." They had no beams, radios, or beacons, only their knowledge of the country. They have earned every letter of the praise and respect, for only the best live long.

Back in Akiak, I called to see a baby whose body was covered with sores, and found that she had chickenpox. I gave directions for the child's care. As I left the house I heard the church bell calling the natives to services. I proceeded there, too. When the hymns were finished, I announced the presence of chickenpox in the village, cautioned them against visiting the homes of the sick, and asked them to report any others who became ill. I also mentioned the dangers of tuberculosis and asked their help in preparing a vacant house where we might isolate those with the disease.

Medicine, to Akiak's people, performed magic. It cured, or it didn't, regardless of the care given the sick. When I again visited the little child with the chickenpox, I found she had developed pneumonia. The room was cold. The mother, who was a widow, complained there was no one to bring wood, so I went to the native store where I found several men loitering. They promised to get wood only after I became insistent. Next morning I visited the child again. I knocked, then opened the door, passed through the storm room and knocked again. On hearing, "Come in," I shoved the door open. I was hardly prepared for the scene before me. In the middle of the room, on a box covered with white cloth, lay the little girl, also in white, resembling a little doll with her small hands crossed on her chest. For a while I stood and looked without making a sound. As my eyes became accustomed to the darkened room, I saw her mother sitting with her other child on her knee. With cap in hand, I stood for a minute, then began to back from the room. Several voices called to me, and for the first time I saw that the house was filled with natives who were sitting in the shadows against the wall. They were attending the feast being held for the dead. They cheerfully asked about the health of the others in the village. I answered them, then took my leave. Only then did I recall having heard a single toll from the little bell in the church sometime during the night. That was a message to the village that death had visited.

A message summoned me to Bethel to examine a man on trial for sanity. The trial, I learned, was of a native from Goodnews Bay. The U.S. commissioner presided and the first thing he did was take me into a room where he introduced the prisoner and asked me to examine him. I was to talk to him privately, so, when the marshal had left the room and the native and I were alone, we talked for a few minutes about commonplace happenings. When I could not see that he was unusual I asked him to tell me why he was there and the events leading up to his present trouble. He spoke with surprising frankness, saying he "always went crazy when drinking sourdough liquor." This, he explained, was the product of fermenting cornmeal stirred with water and left standing in a barrel. He seemed more interested in telling of events happening in my village.

"You know Mr. Peter Williams?" he asked.

"I know Joe Williams," I replied.

"No, not Joe Williams; the Williams who runs the native store in Akiak."

"Peter Williams is dead," I replied.

"Yes, I know he is dead. You know Mr. ——————?" he inquired.

"Yes, I know ——————."

"He killed Peter Williams," was the startling reply.

More he would not say. I recalled hearing that Peter Williams had been the Akiak village storekeeper. He and three others went to an island in the river a few miles above Akiak to hunt geese. They included two gallons of whiskey with their hunting equipment. Mr. Williams did not return with the others. He drowned. Now the natives would not go near this island at night. They believed the spirit of Peter Williams could be seen any night circling the island in a boat, searching for his lost body. I concluded the native was sane and that he would continue to be rational until he obtained more drink. However, other testimony brought forth additional information! He had entered a certain Jo Jean's house, pointed a gun at the latter and sat for a long time debating whether or not to kill him, while keeping him covered with his gun.

The jury consisted of four men and two women. Two of the men were married to native women and were selected with the view they would favor the native. The officers in charge did not want it said they had shown partiality to whites. However, the verdict was unanimous. The man was pronounced insane. They reasoned that if he were declared sane and permitted to return to Goodnews, he would be killed by some of the natives there. We all considered him harmless except when crazed with drink, yet he was committed to Morningside Hospital in Portland, Oregon. This, to a native, would be just a glorious vacation. Later I learned he went only as far as Juneau. By then he had convinced the deputy marshal of his sanity and he was returned to Goodnews.

Another native boy from Eek, a village downriver from Bethel, was brought to Bethel and a complaint of insanity was filed against him. He was lodged in jail where I interviewed and examined him. I found him mentally sound. He told me of an illness that left him a partial cripple. I suspect he had polio or cerebral spinal fever. His eyes were crossed and his face twitched, especially when he became nervous, and he spoke with difficulty. The natives of the village feared crippled persons, thinking they were possessed by some evil spirit and that they had supernatural powers. The natives shunned this one especially, fearing that if he looked upon a pregnant woman harm would come to the unborn baby. A trial was conducted, during which much evidence was given by the natives and there was much discussion between them and the jury; finally the boy was released.

Following this trial there was a virtual epidemic of natives reported insane, and I was requested to check on them. In nearly every instance investigation showed that they were not insane but had become a burden to the community. In one instance an old man, who was wed to a native woman with several sons, disliked one of them. He wanted me to pronounce the boy insane and send him to the States, saying he himself had once been U.S. commissioner and had sent many to the asylum less affected than this boy. And I was to find, too, that there were instances where charge of insanity was made by a sourdough who wanted a trip to the States. By accompanying an insane person to Portland, he received free transportation and pay, could visit friends and relatives, buy supplies for his store, attend to business matters, and also have a nice vacation.

There is, we are told, more insanity per capita among the whites here than in the States. We observed more hysteria, if not downright insanity, during the short, sunless days than during the sunny summer months. We concluded there was a direct connection between the two—whether it was the irritability of children in school or the grown-ups confined by the long hours of darkness. The other factor influencing natives, to a greater degree than the whites, was their superstition.

One day a boy dashed into the dispensary and breathlessly waved for me to follow him. I could see that he was very much excited, so ran alongside as he started for white Akiak. Someone was injured and was bleeding badly. With emergency bag in hand, I started for the opposite shore where I saw a team approaching at a dead run while the driver waved frantically. Soon I recognized the patient with him as our first patient, the half-native girl, her face streaming with blood. I applied tight bandages to control the bleeding; then we continued back to the dispensary. There we found she had been completely scalped, as if an Indian warrior had done the job. Only in a few areas was any of the scalp attached. She soon went into shock from her injury, as well as from loss of blood, and we were about as busy with her then as the first time we had ministered to her. Again she recovered. The injury had occurred when her sled overturned as it went over the riverbank and she was thrown off. Sliding on the ice she struck the sharp prow of a boat frozen in the ice. The sled followed to complete the scalping when the runner hit the other side of her head.

A young woman of the village developed acute appendicitis. I first learned of her illness when Jimmie, the medicine man, came and demanded castor oil. When I refused, he informed me, "You are here to give me the medicine I ask. I know what the people need." I found the woman had been ill two days. I sent for a plane that was in Bethel, but instead of coming directly the pilot went downriver at the request of the U.S. marshal to pick up a native arrested for petty theft, then on to Goodnews Bay for another native who wanted to go to the hospital. The plane arrived the morning of the third day. I was out early to see that the patient got aboard, and ended up by pushing a sled unassisted, taking the patient to the opposite side of the river and putting her aboard.

I was provoked when no one assisted this native woman to the plane. At the time I advised the family of the plane's charter they wanted to know who would get her to the plane. I thought this was a little irregular until I was told that one of the natives had put in a bill to the government for helping carry his mother to a plane which transported her to a hospital.

To a teacher who urged me to follow her practice and give generous doses of castor oil I explained that indiscriminate use of a cathartic might cause an inflamed appendix to rupture and stated I seldom prescribed it. "I don't care about these newfangled things," the lady replied. "I have good luck with castor oil."

Teachers found they had rather generous supplies of medicines and medical equipment on their invoices, and since they were often called upon for first aid they did as best they knew. They were anxious to acquaint themselves with the best way to do things medically, and it appeared they gave the old shaman considerable competition.

One shaman had become proficient in extracting teeth. He explained his technique. He had the patient lie on his back on the floor. With one knee on the patient's chest, the dental forceps were applied. "If the tooth breaks, I just leave it until it festers," he related.

And so it went, as one day followed another so did the illnesses and injuries I was asked to treat. No two days were alike, no two illnesses or injuries the same. The life of the medicine man in Alaska was neither dull nor monotonous, but filled with work. I felt our time well-spent. I did as much as I could to make health and life better for the people I served, but I wished I could do more.

Beautiful parka typical to the Kipnuk area.

Expedition to Alaska's Most Primitive Area

I had been notified by the medical director in Juneau that a scientific expedition, led by a Dr. Waugh, was to be made to the most remote part of Alaska and I was directed to accompany it. Pilot Saseen called for me late one afternoon, and I said goodbye to my family and was soon in Bethel.

In the roadhouse I met Dr. Waugh and Dr. Siegel, his biochemist assistant. Dr. Waugh was assistant professor of orthodontia at Columbia University and his expedition was backed jointly by his university and by the Federal Government. He was a dollar-a-year man. His sponsors paid his expenses and purchased the equipment for his study, which was concerned with the relation of environment to the Eskimo's teeth. Dr. Waugh was no stranger to Alaska. He had done research on the Kuskokwim years previously. He enjoyed a busy life in New York but also relished his summer work in Alaska.

Mr. McVeigh, the proprietor of the roadhouse, could not refrain from telling how his guest had asked for a room with bath. McVeigh explained there were no such accommodations, and Waugh had answered, agreeably enough, "Then just give me the number of my room." McVeigh replied, "Mister, you haven't got a room, you just have a cot along with the rest of the men." Dr. Waugh, however, did get his room, although there was but one in the roadhouse.

Next morning we gathered about the plane parked on the river ice, loaded it with all the equipment and baggage and then boarded it. We were so crowded for space there was standing room only, for in addition to Dr. Waugh and Dr. Siegel, there was another dentist, Dr. Pyle, chief of the Department of Interior's Alaska Dental Service, our nurse Mrs. Hurst, the pilot, a mechanic and me, seven in all. Fortunately we had the whole river for a runway and were soon airborne. For an hour we saw only the white, snow-covered tundra; not even a spear of grass or a willow darkened the monotonous snowscape. We saw many herds of reindeer, which appeared from the air like so many aphids, and as our plane approached they scampered in all directions.

Our destination was a village called Kipnuk on the Bering

Sea west of Bethel. For the first hour we flew over a dog trail, the only landmark we had. In this part of the world magnetic compasses were inaccurate and not to be depended on. Eventually we sighted a wooden building, painted yellow, and a flagpole—the school, no doubt. We circled twice. There were some white cloths fluttering to mark the landing strip. We came down fast, sideslipping, almost dropping, it seemed to me. Yet, overloaded as we were, we landed safely.

Happy-looking, excited natives gathered about the plane and helped unload the baggage and equipment. Six or eight sleds were required to haul it all. "Sas," the pilot, lost no time and soon he and his mechanic were back in the air. We followed the natives with the sleds to meet the Joneses, the teachers who were to be our hosts.

I was surprised to find these natives the most healthy and best developed physically of any I had seen, and also the most shy. Their faces were broader and more Oriental, their chins more pointed, and there was a similarity among them, as if they were closely related, that I had not seen elsewhere in Alaska. Their dress was different from that of the interior natives. Most parkas were of drill or canvas, though some of the more ornate ones were of feathers, swan skin, seal and reindeer. Later I saw many parkas ornamented with small bells and colored beads, and I wondered if these ornaments did not date back to Russian times. Other decorations of more modern make were alarm clock wheels, bits of suspenders, etc., sewed onto the parkas. On special occasions, in addition to a headdress, many women and girls wore beads on their foreheads and in their ears. Their mukluks were from hair seal.

The Joneses met us at the door of the school. They had been expecting us for several days, communications having been carried on by radio. They were a fine-looking pair, past middle age, both strong and stocky. Mr. Jones stood less than six feet in his beaver cap, from which a foxtail waved in the wind, his face ruddy, broad and good-natured. I thought Mrs. Jones had one of the kindest and most gentle faces I had ever seen. She had been a nurse at the Mayo Clinic in Rochester, Minnesota, when (on a tour of Alaska some years before) she had met and married Mr. Jones, at that time a pharmacist in Fairbanks. They had embarked upon matrimony and teaching at the same time and were apparently making a success of both. After spending some time at Old Harbor (Kodiak Island), they had been transferred to Kipnuk four years before. Here they had built the school and introduced the English language to the villagers.

During a period of at least 14 years preceding the building of the school, the village had been visited by only two white traders. When the Joneses came, the natives neither understood nor spoke English and the Joneses understood no Eskimo. By the time our expedition arrived they had taught the children to speak some English and had learned to speak almost as much Eskimo themselves.

The school included their living quarters (consisting of a large livingroom, two bedrooms, a kitchen, and an attic storeroom), two schoolrooms, and a dispensary. Mr. Jones had constructed a basement, but it filled with water as soon as the furnace was in operation. The house began to sag as the heat turned the permafrost into water. Finally Mr. Jones filled the basement with tundra and provided ventilation for the space beneath the house. The ground once more became hard and the house was made straight again. He had no further trouble. The house was heated by coal stoves and was very comfortable. They had devised a unique, and practical, water system: several metal barrels with wooden covers were arranged along the wall near the kitchen stove, and clean snow, which soon melted at room temperature, was put into these every day to provide a plentiful water supply.

When we arrived the ground was covered with a few inches of snow, drifted and ridged by the strong winds. To the west there was not the slightest break in the monotonous landscape. Eastward there was a slight rise. Here and to the north were several brownish hillocks, possibly 15 in all. These were the igloos housing the entire population, some 150 natives. In the center of the triangle formed by the two groups of igloos and the school was the graveyard, a few small mounds topped with stakes on which were fastened guns, spears, kettles and pans for the use of the spirits in the land beyond. Under the snow were the boxes that the bodies had been placed in, folded double on themselves. The boxes rested on frozen tundra.

Each igloo appeared to be a mound of soot-blackened snow, possibly five or six feet in height and twelve feet in diameter, from which a stove pipe protruded. Often one or two very small, mangy, lean dogs huddled for warmth against the sheltered side. A few igloos had glass windowpanes, but more had windows covered with seal gut. Near one igloo was a sled, very poorly constructed of driftwood and much more primitive than those seen on the river. Some of their sleds had foot brakes, but in this flat land it was possible none needed braking. The dogs were tied on lines, which were anchored at both ends, generally by walrus tusks frozen into the snow. By another igloo a pole stood upright in the snow. At the top of it, as high as a man's head, was tied a pair of water boots, drying in the wind. Nearby a kayak rested, bottom up, on four poles.

The village was without toilet facilities other than those used for centuries, and evidence thereof was plentiful. There were no toilets at the school—except the usual gasoline can arrangement in the teachers' quarters—the idea being that it was better to have the refuse distributed widely rather than in one area. Nature rapidly erased all evidence of habitation, the teachers explained.

The scientists began their experiments soon after arriving. Dr. Waugh's first experiment was to test the bite of the natives. The apparatus used was called an orthodynometer and was made to record bites up to 300 pounds. The doctor offered a sack of oatmeal as a prize to the one biting hardest. The first man spun the dial all the way and banged the recording hand against the post so hard that Dr. Waugh moved hastily to recover the instrument before it was ruined. The native uses his teeth as a vise with which to hold kayak ribs while bending and shaping them. The women chew the heavy ugruk (bearded seal) skins to make them pliable for boots and so develop their jaw muscles to a greater degree than do the men.

Finished with this experiment, Dr. Waugh selected children for another. Doctors Pyle and Siegel, as well as Mrs. Hurst, were to assist him, but (as they were interested at that time primarily in examination of teeth) I was free. I made the rounds of the village with sketchbook in hand and Bull Durham in my pocket to trade for any interesting curios I might discover.

As I surveyed the village, which reminded me of a prairie dog town of the Middle West, with little heads bobbing up and down in the igloo entrances, a man began a conversation. I gathered he wished to trade. He returned to his home and I followed him down the little tunnel, its snow walls yellow with urine, for my first visit inside an Eskimo igloo. He kicked aside several snarling dogs. I stooped almost to my knees as I passed through a second and a third door and then entered a single room.

The only light came from a central opening at the top of the igloo, possibly two feet in diameter and covered in part by a seal gut. I found I could not stand erect. The room was nine by nine feet. A gasoline can half-filled with urine stood beside the bed. Some skins were soaking in this—evidently their process of tanning skins. A tiny homemade tin stove stood on the far wall between bunks, which were covered with grass mats and reindeer hides. The floor was wooden slats strewn with grass to keep the feet of the occupants out of the water. Each bunk was occupied by a man, a woman and five or six children. There were two families to one igloo. We did no trading, for there was absolutely nothing of value in the place. I was pleased by the visit, however, for it was the beginning of my acquaintance with the people.

Outside once again, I wandered on, finally coming to the river just below the village. More than 20 men and children stood about holes chopped through the ice while 100 starved dogs ran hungrily about. Long-handled hoop nets were let down through the holes in the ice to the bottom of the river, and after several minutes these were brought back to the surface. Often they held many small fish, and there would be a general rush of dogs attempting to get a bite of the catch. The remainder was dumped onto a canvas or into sacks.

We were told that these villagers had no reindeer. That winter, however, they had been killing those belonging to other villages. To pay for the deer they sometimes brought a mink or fox skin, or even a pair of mukluks, to the teacher. The teacher turned these over to the reindeer supervisor, who in turn gave them to the store in exchange for food for the natives while they worked at reindeer roundups.

Soon now the natives would scatter over the tundra in search of eggs, of which Mr. Jones had observed 14 species. Each spring they gathered tons of these, differentiating not at all between large or small, ripe or otherwise, using clubs to kill the mother birds, who stayed on their nests to the last. The Joneses told me that the swans, which weighed from eight to forty pounds, were the most tasty of all the birds and that the natives often filled a kayak with them in a day. But Mr. Jones said that for a long time he could not get within a gunshot of them. However, he learned the Eskimo way of hunting these birds and from then on would usually get as many as he wished. I did not publicize his method, for this species of game was already becoming scarce.

The week following our arrival I examined the children chosen for the experiment, and found that all had a slight fever, with one exception, and he had tuberculosis. In the course of examination I found that the heads of the children were covered with a gray crust about three-quarters of an inch thick, composed of matted hair impregnated with writhing masses of lice and nits. Mr. Jones told me that they had been much worse when he first came, as their hair was then long and matted, but that he had managed to give some of them haircuts. The boys and girls were kept together in one of the schoolrooms and were watched over by Dr. Siegel, who left them only for his meals. The remainder of the time he was looking to their diet and collecting, bottling and labeling their excretions.

The diet fed the children during the experiment was that to which they were accustomed: needle fish, black fish, and seal oil. Needle fish were small, perhaps two inches in length, with sharp spines on the back fin and a pointed tail. They were obtained daily from the nearby river by dipping nets through holes cut in the ice. They froze within minutes after they left the water and, when wanted for eating, were thawed. When they began to wriggle they were ready to eat. The diner grasped them by the tail with thumb and forefinger, dipped them into seal oil, then popped them into his mouth, head first, where strong teeth put an end to their struggle. The black fish were larger and in appearance like catfish, some growing five or six inches in length. They were caught with traps in the tundra lakes and small streams. These were sometimes cooked—scalded we would call it—and eaten that way.

The children varied their diet with a tidbit the doctor had not counted on. He was surprised by a sudden demand for bottles—small bottles. Watching to see what was being done with them, he saw that the children were catching lice in their hair, now aroused to activity by the warmth of the room, and popping them into bottles. The children then ate them at their leisure.

Not long after I had completed my examination of the children I kept thinking I felt lice crawling in my woolens. I inspected them and found I was right—very right! I changed my underwear and washed it according to the rules, with good soap, so the wool would not shrink; then I hung it in the open air. It was still 28° below and the wind was blowing a gale. Soon the suit was frozen stiff and filled with snow. After a few hours I thawed it beside the stove in the vacant schoolroom. Upon inspection I found several large lice that came to life as soon as they became warm. At this I disregarded all directions as prescribed for the care of delicate woolens, not caring if they shrunk to no size at all, and placed the underwear in a bucket and boiled it. This time the lice were really dead.

In Kipnuk, as in most Eskimo villages, there was a dance house, or kashga, where the men lived, ate, slept and worked. The sleds and kayaks were built there while the wives and children kept to their igloos. There, too, village meetings and dances were conducted. We were invited to attend one of the latter. We entered a narrow, down-sloping tunnel, stooped low for a distance of 20 feet, shoved aside a curtain made of a bear hide, then squirmed through an opening that barely admitted my body. The room was about 14 feet square, with log walls over which earth had been banked. The logs were piled upon each other crib-fashion, each log shorter than the one below it, until at the top was left a square opening about two-by-two feet. Seal gut covered this tightly. At times one edge of the frame holding the gut was lifted and the warm air escaped, forming a vapor cloud resembling smoke in the outer air. There was no fire within the kashga.

About 75 persons were crowded into the room. The men sat or knelt around the wall while the women sat flat on the slatted floor with legs straight out before them, the position that they were accustomed to in a kayak or at work.

There were three drums, varying in size from about fourteen inches to three feet in diameter. These resembled barrel hoops covered with seal gut and were held upright by a short handle. They were struck on the underside by a small switch. The musicians were scattered over the entire room. They apologized for having so few drums, saying that at one time they had 24.

The men were stripped to the waist, but they dripped perspiration profusely. One began a song. Two girls rose and stood before the entrance to the kashga; with faces turned away, they adjusted their dancing headdresses, their beads and tassels. Suddenly the chorus rose to a din, swelled by the voices of all in the kashga. The drums boomed out like hammers beating on a tin roof. Now the girls danced. They bent their knees, necks and arms, jerked, grimaced, swayed, as if with St. Vitus' dance, and yet their movements were rhythmic in the extreme. We were told that each dance portrayed a story. I observed that all were very solemn until at some point in the dance they burst out in laughter.

About midnight the dance ended. We crawled through the little opening and into the low tunnel entrance; on hands we continued up the incline that brought us out into the clear, cold night air. I stood in the crowd filling my lungs with fresh air. I stopped at the sound of water pouring onto the snow, then looked for the source. The Eskimo women and children were stepping to one side as I had done, to avoid being splashed. It was the old medicine man, who had preceded us out into the fresh air, voiding on the snow, unmindful of those about him.

The next night we were again invited to the kashga to a dance. Again there was singing by the audience, led by the single chant of one of the men, and again the chorus of "Ee, ee." The two girls at the entrance stepped forward and started their dance, their caps with the tassels waving back and forth in the dim light as might the mane of a lion. A man sitting on my left, holding a wand with an owl mask at the tip, shouted directions. This wand signified that he, the chief, had the wisdom of the owl. His calling reminded me of the oldfashioned square dance. To his calls, the drums responded loudly and the dance was wild, then in turn gentler with the motions more subtle. He was the symphony director, as it were, of the tundra.

The drums stopped and a chant began. Apparently there were several verses to all songs. At last the two dancers concluded their dance. Shouts of "Hi! Hi!" indicated unmistakable approval. Two more women began their dance. There appeared to be considerable competition. As the evening progressed the dancers were more and more skillful; apparently those who danced first were less experienced, as those dancing the second night appeared better and they danced with greater abandon.

The following day we had little work to do. I decided to visit "Nob Hill," as Mr. Jones called the small group of igloos on the slope above the village. The old medicine man came to meet me and he motioned for me to follow him into the kashga. Inside were quite a number of men and it appeared a poker game was in progress. As I watched I could not recognize the game; it could have been the Eskimo version of strip poker as the results appeared similar. Six men sat flat on the floor around a small piece of canvas. Before the players were piles of cartridges and other articles. The cards were dealt, and after a little play, each placed a few cartridges in the center of the canvas. After more play one of the players raked in the pile to add to what he already had, just as in poker. There was much banter, both from the players and the spectators. I noticed that two spectators were without their trousers. While I watched a small boy arrived with a box of cartridges for one of the naked men, who then re-entered the game. Two hands around and his shells were gone and he again became a spectator. The natives had expected to dance for us again at night, but the game was still in progress so they canceled the planned third night of dancing.

The Eskimos, I observed, had several minor peculiarities. One was that they never used the first person in conversation. For instance, John would say, "Frank is very hungry," or, "Frank's belly hurt, he is so hungry." Frank would reply, "No, not Frank's. John's belly hurt, he is so hungry." Only after long association with the whites did they learn to say "I." A small thing, but odd to me, was that no one ate alone. I always saw two men eating together, and Mr. Jones told me that such had been his observation, too. Also, they were eager to receive gifts, yet were loath to give anything and demanded pay for the smallest favor. I noticed that Mr. Jones paid the native who carried a letter to another village for him, even though the man was going there on his own business. Jones insisted that to ask a favor of a native was to acknowledge the latter's superiority.

One day I saw an old woman who had been a near-victim of one of the village's ancient customs. Mr. Jones told me something of her history. The villagers, departing for the hunt in springtime, had sewn her eyes shut, so that she might get on better in the spirit land, and had left her behind with the lame dogs to die in the water and slush of the spring thaw. However, when the weather changed she climbed onto the igloo where she stayed for four or five days. When the water had receded, she descended from her perch and was able to exist until the villagers returned in the fall. When I saw her, she had a bunch of feathers sewn into her cheeks. I never learned the reason for her strange decorations.

Other customs of the village seemed extremely filthy. No longer did I offer my hand to all I met. They expectorated anywhere and everywhere, and their palms served as handkerchiefs for their continually running noses. Their toilet habits were primitive.

I was often alone with the Joneses since Doctors Waugh and Pyle visited many other villages. With the exception of one trip I made alone by dogsled, and an air trip to Chevak just before our departure from Kipnuk, I remained there for the entire six-week period. I found it monotonous doing nothing day after day. We could not go for long walks. The country was so level that it all looked the same; a snowdrift covered the school building and one lost sight of the village within half a mile or less. To become lost in that country would be disastrous. We never went far.

We amused ourselves in various ways. I bartered for spearheads, sealing hats, sealing spears, three-pronged spears for hunting birds, pieces of ivory darkened by age, ivory story knives, tobacco boxes of wood and ivory used for storing the family cud, stone drills, dolls with faces of ivory, hands of muskrat paws, and fur clothing, until I was loaded down with curios. Other times I read the 20-year accumulation of *National Geographic* or just conversed with Mr. and Mrs. Jones.

On Sundays the natives held services in the schoolroom. We attended the singing but did not stay for the services as they were in the native language. We sat and read. Mrs. Hurst and Dr. Pyle knitted. Sunday afternoons we watched the children tell stories with story knives. These knives were made of yellow ivory, beautifully carved and decorated, and some were more than a foot in length. They were used to smooth the snow and to draw pictures illustrating the story, the point being used much as we would use a pencil on paper.

One day Mr. Jones and I found a gallon of gin left by the pilot; this we hid in the attic. Each day at 4:00 p.m. sharp we quietly climbed the stairs, took the bottle from its cache and measured out a small portion, which we sipped slowly. We then carefully hid the jug, as we knew that Mrs. Jones would not approve. We were sorry when the supply ran out.

Evenings the radio brought us news of the outer world. Occasionally we heard the broadcast from Anchorage; at other times Mr. Jones got local news by talking with other radio operators. On St. Patrick's Day we heard that a stampede to Platinum was in progress. A dog team had come from Nome and other prospectors were arriving in numbers.

In the small world the Joneses lived in, little things loomed large. By radio Mr. Jones heard that the cats at Platinum, called Mussolini and Annie, were expectant parents. The residents of the camp made up a pot, each putting in 50 cents and guessing the number of kittens there would be. All the white inhabitants on the river waited in suspense. The radio kept the residents informed. When the kittens finally arrived there were four, and the jackpot was divided among three lucky guessers.

We heard rumors also over the radio that the "girls" from

Flat were considering moving to Goodnews (near Platinum). The names of these sourdough women interested me. "The Washington Mare," "Short and Dirty," and similar names filled the "social register." It was said that these women often tired of the exciting life of the mining camps, fell in love, married and became respected and influential members of society. Mr. Jones mentioned knowing the lady known as "Short and Dirty," who told him she had been married to a famous author of Alaskan stories.

Early one morning in the third week of our stay, two natives arrived from Kwigillingok bringing a note to Mr. Jones. When I found they were returning directly, I bargained to go along. We were soon on our way. Our sled, heavily loaded, was drawn by 13 dogs, all thin and small. There were three of us. The driver was named Wassili, and he suffered from tuberculosis of the throat and was so hoarse he could scarce make a sound except for his constant cough. We made good progress, but as the others did not speak English we traveled in silence. Part of the trail was over the ice of the Bering Sea. This was piled high, great chunks having been shoved up from time to time. Over and around these the dogs picked their way. The sled was pulled slowly to the top of one of these large pieces, then dropped, and however one tried to make the landing less abrupt the sled came onto the solid ice with such suddenness that the rider's teeth were all but shaken loose. The trail then led over a lake and we skirted open water in many places. This lake was considered very dangerous because it did not freeze solidly; it contained black fish that managed to keep air holes through the ice. Only for the experienced native was it safe to traverse.

I had been obliged to run a great deal of the way in order to keep from freezing. I was dressed in a reindeer skin parka, hip-length boots with four pairs of socks inside them, but sitting on a sled, exposed to the sharp wind, soon numbed one's feet until there was no sensation remaining. Sensing the danger at this point, and disregarding the pain and stiffness, I took my turn at the sled handles or ran alongside. For a time I felt as if I were running on lifeless stumps, then, as circulation continued to improve, my feet were soon back to normal.

We had left Kipnuk at nine o'clock and arrived at Kwigillingok at five, having traveled nearly 50 miles. The snow-covered tundra was so level I was able to see the village long before we arrived. First I saw only a black speck. I hoped it was not as far away as it seemed. After half an hour I was able to distinguish the flagpole, which I knew must mark the school building. Distances are very deceptive on level tundra. (When mountains came into view on the horizon, they seemed to have flattened tops, due to the mirage effect of extremely cold weather, and the tops reminded me of the rimrocks of Eastern Oregon.) At the edge of the village I saw crosses protruding through the snow, indicating the village graveyard. On these crosses were snowshoes, spears and rifles. As we drew nearer I saw the partially snow-covered boxes lying on the ground. In an older part of the graveyard skeletons lay exposed.

My drivers left me at the school where I met the teachers, a young couple named McGee. They seemed delighted to see me. Their village was isolated and no doubt their life was a bit monotonous. I liked them very much. Since I had eaten no lunch, I was very pleased when they invited me to dinner.

I recalled that the Joneses had advised me against this trip because of the danger involved. They had told me about the narrow escapes the trader of Kwigillingok, Mr. Dahl, had as he traveled from village to village on the coast obtaining furs and ivory. To my surprise, while I was eating supper, Dahl appeared at the McGees'. Dahl was a wiry little man of Pennsylvania Dutch descent. He had lived in the area for 30 years and was friendly and cheerful. He had married three times, each time to a native, and boasted ten children. He had great respect for the country's storms and, as a precaution, had a ship's compass fastened to the rear of his sled, navigating the coast tundra rather than trusting only to his sense of direction. I had noticed that the natives also had their sleds so equipped.

To my surprise, I found that the McGees enjoyed living in that desolate village and it was only after they explained part of their past that I was able to understand. They had left San Diego at the start of the Depression. Working their way north they finally arrived in Alaska, where they had faced nearly every peril from starvation to freezing and drowning. Finally, by a happy thought, they had applied for a school position, and found themselves in this distant outpost. To them it looked like heaven, though it looked like some other place to me. Since I was tired, I was glad when the McGees suggested that I might like to retire.

In the morning we prepared to examine the children and vaccinate against diphtheria and smallpox. There were about

40 children, and when all were assembled Mrs. McGee led them in singing "Good Morning" to the tune of "Yankee Doodle." Mrs. McGee had improvised a couple of verses, which were both clever and appropriate. The children enjoyed their singing and sang at the tops of their voices. At command they turned right, then snapped a salute to the flag. The influence of Mr. McGee's 12 years as a Marine was most evident.

Vaccination of the children during the forenoon had been without objection from the youngsters. I was well pleased with them. We sent word to all the others of the village to come during the afternoon. Mrs. McGee rang the school bell, but no one appeared. Not even the children came, so there was no one to send as messenger. At last we set out to visit them in their homes. I was not anxious to go and I felt there was little to be accomplished since we had immunized the school children, but the McGees were anxious for me to see the village. We found the first door barred, as though there was no one at home. However, we were admitted and saw a poor terror-stricken woman so ill with tuberculosis she was unable to flee. She sat trembling while her husband stood beside her holding her hand. His posture was defensive as if he expected me to attack them. Perspiration stood out in droplets over the sick woman's nose as evidence of genuine fright. Other natives present either portrayed fright or viewed us with sullen defiance. We took our leave presently and after passing several other barred doors returned to the schoolhouse. I wondered at their fright and inquired until I found the answer: the village shaman had told them the white man's medicine would kill them. A year earlier Dr. Myers, my predecessor, had been summoned to aid a villager suffering with a large carbuncle. Unfortunately, the patient died very soon after the doctor had incised it. I took comfort in my belief that all the children I had immunized were apparently in good health and trusted none would become ill from any cause. In event one did I would be blamed.

I found the beliefs of these natives varied a little from those at Akiak. For example, the shade abided by the corpse (four days were he male and five if female): during this time no one in the village dared do any noisy work or use sharp objects for fear the shade might injure itself; if injured it would become angry and would do great injury to those nearby. But shades could not cross bodies of water; it was possible to chop wood on the river ice or on the opposite bank of the stream.

Soon after the spirit was freed, the relatives held open house for a feast. The nearest relatives sat on either side of the body (dressed in its best clothes) while friends and acquaintances filed past. The family passed food to the guests, then took some for themselves. Food for the spirit was placed behind the body; it would be used by its spirit during the journey to the spirit land. Often the body was placed in a sitting position, though the posture varied in different localities. The heels were drawn closely against the hips and the knees pressed against the chest. The elbows were kept at the side of the body and the hands were clasped over the abdomen, the left arm and hand always beneath the right. In former years it had been the custom to give feasts once or twice a year for the dead. At that time the natives opened a window and invited into the igloo by name the shade of each person who had died. However, this custom was no longer practiced.

After the feast, the corpse, still in a sitting position, was wrapped in grass mats or fur and tied tightly with rawhide. It was then lifted through the smoke hole or window at the top of the igloo, and this opening was closed tightly afterward. The body was never taken through the door for fear the shade might find its way back and cause the death of another of the family. The corpse was then taken to the driest spot on the nearby tundra, where it was placed in a crude board or driftwood box; rough planks or logs were put on top of the box to weight it down. The boxes were placed on top of the ground near the village, the newer part of the graveyard in Kwigillingok being a few hundred feet from the schoolhouse. Beside the grave of a man were placed his rifle, kayak paddle and other articles familiar to him. Besides the grave of a woman were the articles used by her. These items were usually attached to a pole erected beside the box, and were for use in the spirit world. In earlier times the body was placed on the ground and two stakes were driven at an angle, one on each side of the body, so that they crossed over the face. In some villages a crude box was made and placed a few feet above the ground, but later graves consisted of boxes of rough lumber or driftwood placed on the tundra.

In this particular village the older graves were of logs and very small; either driftwood was scarce or the natives were lazy. These older burial boxes were so small that it was necessary to break all the corpse's bones to get it into the small space. (Even with readily accessible lumber, this custom still prevailed.)

The weather remained cold, and during the night I was awakened by the howling of the village dogs. Peering from my bedroom window I saw a beautiful display of Northern Lights, dark clouds on the horizon from which streamers of pale yellow-green played against the sky.

The next day broke cold and beautiful, but with the wind directly from the north, and the thermometer remained at 28° below. Wassali, my driver, and I were to face into this for 50 miles. I dressed as warmly as possible and when Wassali came to the door with the empty 12-dog sled, I placed my serums in my sleeping bag and he lashed it into place. I bade the McGees goodbye and we began our return trip.

The natives were no doubt glad to see me depart. McGee thought they preferred even the missionary to me, as he only took a few furs for the church. Much greater than their regret over the loss of a few furs was their dislike for the white medicine man.

We set out on our journey, past the graves with the grim spears of departed hunters, and past the new grave of the mission helper who had done the preaching in the absence of the missionary, yet he was buried in the manner of his ancestors with his belonging placed beside him. How queer it seemed to see a sewing machine with his rifles and spears.

The trail led over the snow-covered tundra for a few miles. Not a blade of dead grass or a twig was to be seen. Not a living thing other than ourselves and the dog team did we see as we traveled mile after mile. There was nothing to break the force of the north wind. The long wolf hairs of my parka hood waved across my face as I shifted first one cheek and then the other under the fur to keep my face from freezing. We could not have anything separate us from our dogs; they were the only thread between us and safety. There was no communication between these villages and no one would know our whereabouts until we arrived at Kipnuk; the McGees would not know for weeks or months whether we had arrived safely or not. On the Bering Sea the ice was covered with hoarfrost, with great crystals two or more inches in diameter. Here and there we skirted open water or patches covered with young ice. The open water threw up clouds of steam-like vapor, the source of the hoarfrost. Huge cakes of ice lay in piles. We picked our way and passed over the smaller cakes.

After five hours we reached the village of Oratuk. Here there were only three igloos, and we did not stop. Now, far out, I saw a white fog—the cloud rising from open water.

Elsewhere the sky was clear. By turns Wassali and I drove, one running at the sled handles while the other rode. In this way neither of us tired nor suffered excessively from the cold. At five o'clock that evening we arrived in Kipnuk, having made the 50 miles in nine hours without a single halt. I was thankful for our safe arrival.

I would not forget Kwigillingok. I recalled with pleasure the school children with their military training; how smartly they filed past the teacher to receive their cod liver oil, which they relished, and how they brushed their teeth and washed their faces until they shone. One or two of the girls had come to school that morning with their hair wet from recent washing. There had been one girl who seemed extremely restless. Finally she had pulled off her mukluk and found a live mouse moving about in the grass at the bottom! And there were the young sons of Dahl, the trader, who pretended that they were traders and that mice skins were mink.

During my stay in Kipnuk I learned much of native customs in that district, both from observation and from what the Joneses told me. As in other lands, when in spring "a young man's fancy lightly turns to thoughts of love," so here the winds of spring brought the mating season, or "squirreling time" as the Alaskans called it. A young couple would launch their kayak, then sitting back to back flat on the kayak floor, legs extended, they would paddle away on their honeymoon. Their equipment, in addition to a rifle and spear, included a portage sled for the kayak, which served from lake to lake as their journey demanded (while the man dragged the kayak, the woman would hunt bird eggs, or would produce a little kettle and stop to boil tea for their meal). At night they slept in the kayak, heads together and feet in opposite directions, protected from the moisture or mosquitoes by a small piece of canvas over the opening.

There was no marriage ceremony as we know it. The strongest man took any woman he liked. As a rule, the woman had no choice in the matter. I found one girl of 20 living with her fourth husband, others with their fourth or fifth husbands. However, some of the women looked very strong and I could hardly imagine them submitting to any of these men unless they wished. Sometimes the entire village took part in a wedding, choosing sides. In this event, if the man had sufficient friends to help and succeeded in dragging the bride into his house, it was a wedding; if he was defeated, it was not. It sounded to me a little like football as played around

1900. However, the results of these contests were not permanent. A man might have a wife and children when he left the village in the spring and return with an entirely new wife and family in the fall. The children remained with their mother and were considered an asset rather than a liability. Orphan children did not fare so well. They usually attached themselves to some household and were treated as servants, eating leftovers and usually sleeping on the floor. However, orphans were in demand, for in beaver season the household was permitted ten pelts per person, and the more children the better they fared.

I found amusing entertainment in Mr. Jones' accounts of his part in Alaska history. Among other incidents, he told me details of a diphtheria epidemic in Nome, to which he carried serum along with the mail. With the thermometer at 60° below, or colder (the alcohol in the thermometer froze, and that should not occur until 72° below), Jones' problem was to keep the serum from freezing. He modestly explained that he was only one of many who relayed the serum—35 miles in his case—to Nome, and the man who was supposed to have the next-to-last leg of the journey passed his relief carrier (who was waiting his turn), and also made the last leg with the serum into Nome, to be acclaimed a hero.

Mr. Jones proudly exhibited a beautiful leather briefcase with his name stamped across the front and explained how it came into his possession. The mail-order firm, Sears, Roebuck and Company, had requested from Jones names and addresses of some of the Eskimos there. For his trouble he had received the briefcase as a present.

"Did the Eskimos trade with Sears?" I inquired.

"Yes," he replied, "one of the Eskimos wanted some article and sent out a few furs. In due time he received the article he desired and some money besides."

Jones related how at one time he had been an amateur dentist. A man on whom he called had a cavity in an otherwise sound tooth. Mr. Jones and the man filed shavings from a silver quarter, mixed these with mercury from a thermometer, and, after Mr. Jones had cleaned the cavity as well as he could, he filled it with the alloy. Two days later, the last time Mr. Jones saw the man, the filling was intact.

He recalled, too, many amusing stories of Alaska's early days. One was of the stampede to Nome and Koyukuk, and one hundred men and one woman on the trail. One man shared his tent with the woman. Although they separated their beds by a hanging blanket, all the other men were jealous.

They eventually forced the two to marry, first tying the woman to a sled runner and washing her face for the occasion. The event was recorded by carving on a tree trunk the following rhymes:

The woman:

Ten miles from the Yukon,
On the banks of this lake,
For a partner to the Koyukuk,
McGillis I'll take.
We have no preacher
And we have no ring;
It makes no difference,
It's all the same thing.
—Aggie Dalton

The man:

I swear from my gee pole*
Under this tree
A faithful husband to Aggie
I always will be.
I'll love and protect
This maiden so frail
From sourdough stiffs
On the Koyukuk trail.
—Jack McGillis

Man performing
ceremony:

For two dollars apiece
In cheechako money
I'll unite this company
In holy matrimony.
He'll be a miner,
She'll be a teacher.
I do this job
As well as a preacher.
—French Joe

While awaiting the completion of the dental studies, Mrs. Hurst and I arranged to examine and vaccinate the village population. For the first patient I purposely selected, as an example to the others, a big, strong man who had a large smallpox vaccination scar on his arm, thinking he would recall his previous experience and would submit willingly so

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*Steering pole at the front of a dog sled.

the others would follow as a matter of course. Not so! No sooner was I finished than he let out a terror-stricken whoop and all those assembled stampeded for the door. About half of them succeeded in escaping before Mr. Jones was able to close the door. The remainder stayed in sullen silence.

During that afternoon the village was strangely quiet. Gone were the children and women who had formed a steady stream to trade with us. There was a large bell, perhaps a relic from Russian occupation, placed beside the kashga and we heard it tolling and saw the men gathering there. Several times Mr. Jones peered anxiously in their direction, and once remarked that he hoped they were not considering using those three-pronged spears with which each igloo was equipped. I had thought of that, too. However, the afternoon passed without mishap.

A few nights later I was awakened by a low, thumping sound resembling the beat of drums, which seemed to come from the kashga. I peered out the window, but saw nothing, as the mysterious, muffled drum beats continued. Several times I rose and tried to locate the source of the sound, but still could see nothing. Each time I returned to my pillow I heard more distinctly the throbbing of the drums, as if the sounds were transmitted through the earth rather than the air. Finally, there was a pause, then two or three beats and all was quiet. I lay listening for a half hour, then looked out again. A faint glow in the sky announced the coming day. Everything in the village was motionless. Suddenly, as I watched, ghostly forms gathered before the kashga and moved silently away from the village; those in the lead were carrying a box. Two hundred yards away they stopped, placed the box on the snow, and after a brief pause, returned to the village.

Daylight dispelled the mystery. I walked out on the tundra, and at the spot where the procession had paused I saw a little mound of snow with a small stick protruding. Death had visited the village. I was glad this had not occurred the night following the vaccinating.

The middle of March came. The experiment dragged on monotonously for all except Dr. Siegel. He slept in the room with the children and occasionally found it necessary to delouse himself. On one occasion he evoked the wrath of Mrs. Jones when he absent-mindedly left the pan containing urine sitting on the cover of one of the drinking water barrels. Another time the children became homesick and all went home. It took all the diplomacy and resourcefulness of our group to induce them to return. At the end of the six-week period Dr. Siegel had a large collection of data. In general I had enjoyed my stay and was glad for having had a part in the expedition.

We took leave of our friends. I expressed a hope that the Joneses would next find a place less lonely, since they expected to be transferred the coming year, but Mr. Jones declared he liked their life and did not care to go "outside" again.

Many years later I learned that they were transferred to Attu to teach at the most westerly of all government schools. If they preferred lonely and isolated regions, they could find none more so than Attu. War clouds would be on the horizon even then. (The Japanese fishermen operating floating canneries in Nushagak Bay off the mouth of the Nushagak River used seines two miles in length, in competition with our fishermen who held strictly to our laws governing the fisheries. There were occasional clashes between the two groups.) On Attu, Jones kept his radio schedules and one night another operator asked him if he were not afraid of the Japanese, since his station was our most westerly outpost. He replied that he was not, and that, of the forty-three natives on the island, he had organized an army of nine men. All had hunting rifles. He was not expecting an invasion, but when Japanese troops landed in June, 1942, his little army fought against them. Mr. Jones was killed in the fighting, and Mrs. Jones was a prisoner in Japan during the entire war.

When Saseen arrived to take us on to Hooper Bay, our next stop almost 150 miles north, we bade the Joneses a reluctant goodbye. We were soon airborne, without difficulty this time, for a great portion of our supplies and equipment was left behind. We passed over a few small villages, then some open water; Bering Sea and Nunivak Island were visible to the west. An hour later, we saw a lone building that we took to be the trading post of Chevak. Ahead was a range of mountains (probably the Askinuk Mountains) reaching out to the Bering Sea. Clouds covered the peaks and obliterated the horizon beyond, and we had to fly alongside the range and toward the ocean. No village was to be seen anywhere, and we could not pass the mountains. Soon we saw an igloo and our plane made a landing about a mile distant on the smooth ice of a lake.

No one knew just where we were. Saseen looked into the fuel tank and remarked that we had fuel for 15 minutes flying and no more. He and his mechanic walked to the igloo we had seen from the air. They returned looking even less cheerful than before. At the igloo they had found some Eskimo women who could not or would not talk. Saseen found a little gas in the fire pots that are used to warm the motors before starting them, and he emptied this into the tank, adding a gallon or two to our supply. To our amazement we heard the low hum of a plane, soon we sighted it, and one of our party waved a coat. This "Mirow Air Service" plane wagged a salute with its wings and went its way, evidently giving our pilot his bearings.

We got into the air again without preliminary warming of the engine and headed back the way we had come. Along a low spit extending into the Bering Sea, I imagined I could see buildings, which were actually blocks of ice piled along the beach. I held my watch in hand. If we had gas for only 15 minutes flying, then we would have to land soon. After 13 minutes the motor slowed its speed; the plane began to descend. We could see no village, but as we neared the ground we saw snow-covered hillocks which were the igloos forming the village of Hooper Bay. There was a small school, a Catholic mission, and the igloos.

During our short stay Mrs. Hurst and I hurriedly inspected the village, where I found a few children with chickenpox and an elderly man in need of hospitalization. I arranged for him to go to the Mountain Village Hospital. Saseen was able to get 20 gallons of gas, all the village could spare him. It was a relief to be in the air, and we sighed with pleasure at being able to avoid sitting idle for two more weeks at Hooper Bay.

We were again on our way to Chevak. We flew for only a few minutes, following the course of a small stream. Soon we saw a wooden building with a windmill tower and three radio aerials, another small building with a cross surmounting a steeple, and two or three igloos. Half a mile beyond the village we saw the small plane that had passed us earlier in the day and had given us our bearings.

Saseen landed his plane, sideslipping until the wing almost touched the ground, to avoid overshooting the field, then straightened out to make a beautiful landing. Reaching the other plane, we found its tail skid had been torn off in landing. Its passengers came over and introduced themselves: Mr. Whalen, the pilot; Father Fox, a priest from Hooper Bay, who informed me he had only 92 more years to serve in Alaska (Jesuit missionaries sign up to stay 99 years); Mr. Marshall, a U.S. commissioner; and Mr. Nevell, a deputy U.S. marshal.

The latter two had been conducting a trial at Scammon Bay.

We met the Chevak trader and his wife, Mr. and Mrs. George Shepard. They were quite young, in their late twenties or early thirties, I judged. Their house consisted of a small storeroom, kitchen, livingroom and bedroom. Most surprising was the fact that it was quite modern. There were electric lights and all equipment was electric throughout, down to an electric egg beater. The store had a large stove in the center. Along the wall behind were shelves filled with goods. A counter extended the length of the room, and on this were piled goods for display. Along the opposite wall were benches occupied by natives. One corner had a fence around a shortwave radio, which was in operation almost constantly. Mr. Shepard appeared to be very busy conversing with other ham operators, receiving and sending weather reports, transmitting messages, while carrying on conversations with his wife, guests, and in Eskimo with the assembled natives.

We enjoyed a pleasant dinner with the Shepards, played cards and swapped yarns, and we all slept on blankets on the floor. Whalen probably did not sleep a lot, for during the night he had figured a way of making a new tail skid for his plane, and the judge, U.S. marshal, and Mr. Shepard helped him build it. Soon the pilot was able to take off alone for Nome, and he promised to send another plane for his passengers.

Saseen purchased 100 gallons of fuel for $800. Twenty gallons—four tins—were placed in the cabin, thus insuring plenty of fuel for our trip. The firepots burned under the plane's engine for an hour or more. The engine started readily and soon we were in the air, swinging along the shore of the Bering Sea.

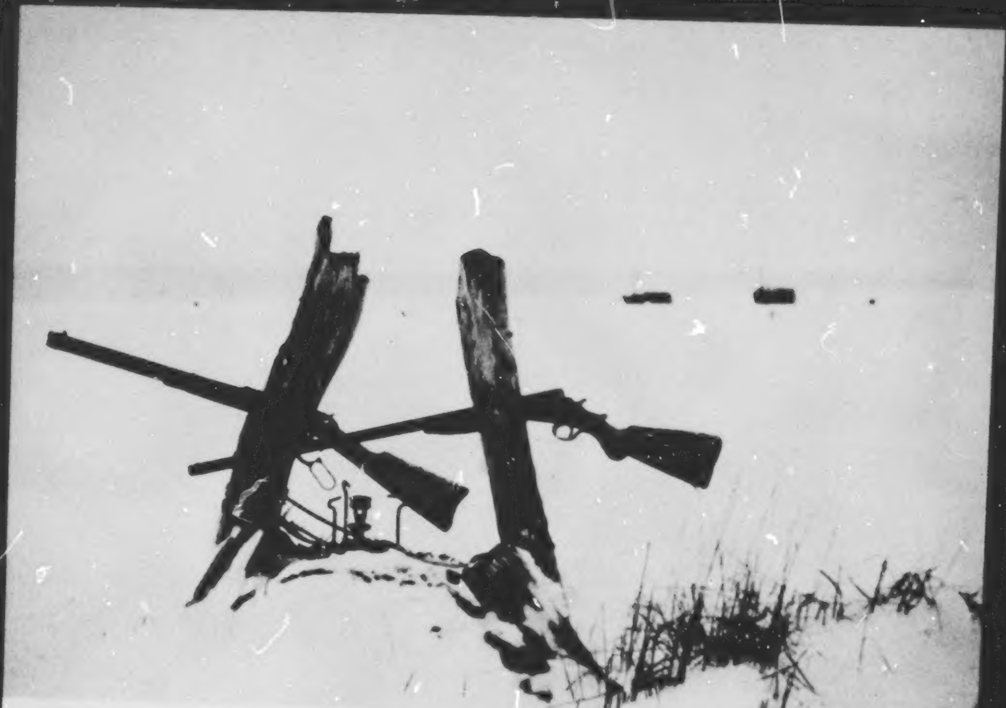
After stops at Nelson Island and Kipnuk we landed at Kwigillingok for gasoline. While there I visited for a short time with the McGees who told me of Mary Christensen, a young girl now in Kwigillingok. Mary was the daughter of the trader, "Wood River Chris," who had recently died. The McGees wanted Mary to accompany me home. Although advanced to only the sixth grade, she was far above the others of the village, a clean-cut, pretty girl.

In front of Wood River Chris's old trading post, where Mary now lived, lay the 50-foot schooner *Kwigillingok*, which her Norwegian adventurer father had built in Seattle. With an Aleut wife he had sailed north past the islands of Bristol Bay, around Cape Newenham, past Goodnews Bay and the red hills of Platinum, into Kuskokwim Bay, and on to Kwigillingok, where he established his trading post. By dogsled he traveled north to Nome once or twice yearly (trading with the coast natives) or up the Kuskokwim to Bethel and Johnson River, and to the tundra of the west. He had had a thousand close calls; then one night his proverbial good luck failed him and he was found frozen to death on the Bethel trail only a short way from home.

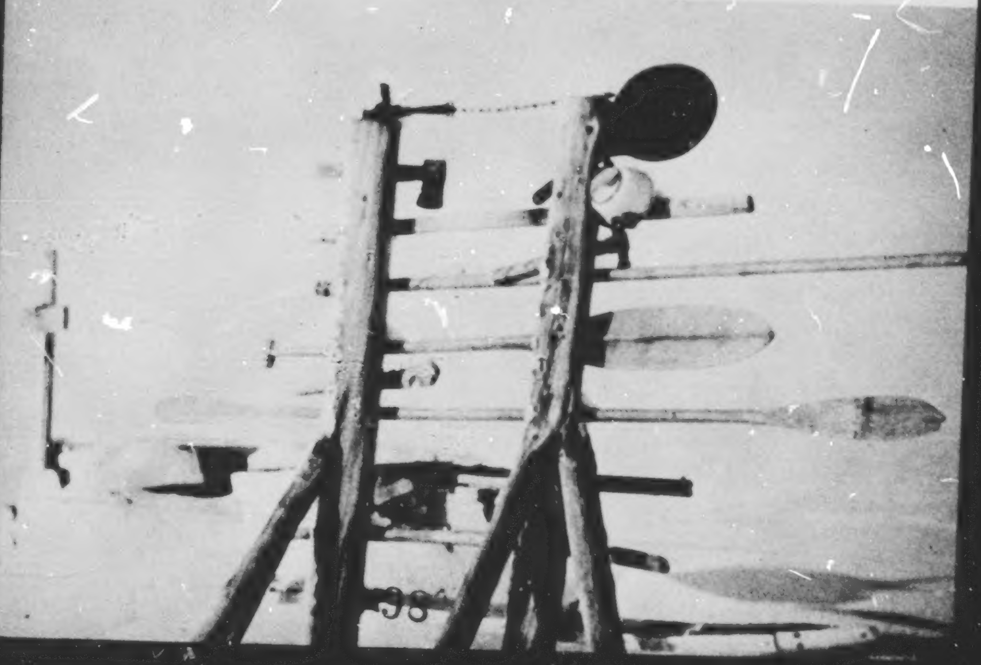
Upon her father's death, Mary was recalled from New York, where she was living with her aunt, and she and her sister were sent to the Moravian orphanage near Quithlook. When grown they returned to their father's trading post and tried to run it as he had, but without success. Mary was now eligible for marriage. Two or three natives wished to make her their wife, as did the trader, Dahl. Mary, however, was not interested, so was glad for a chance to escape. She was a sweet girl with a winning smile, soft voice, and when she spoke it was in broken, but beautifully correct, English.

We boarded the plane and took off for Bethel. I could not help speculating what Mary's thoughts were as she saw the group of natives, the graveyard, and the village fade from view. After a pause at Bethel, I persuaded Saseen to take us on to Akiak. I had to charter the plane anyway, so decided I might as well persuade the artist, Lambert, to accompany me. Minutes later we were at Akiak. Virginia, with Paul in her arms, was waiting on the riverbank. I greeted them, then introduced Mary, the newest member of our family, and we all went happily into the house together.

ABOVE: Dr. George's Akiak neighbor, Noah Jackson, working with his team on the frozen surface of the Kuskokwim River.
BELOW: Aerial view out across the ice-covered Bering Sea.



ABOVE: Two guns and a primus stove are among the personal possessions marking this Kuskokwim hunter's grave.
BELOW: Kuskokwim woman's grave. The graves of both men and women were marked with the possessions of the deceased.

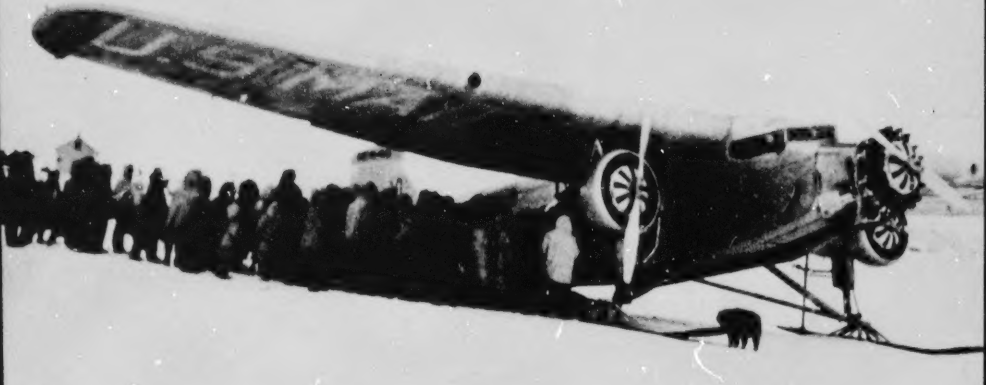


ABOVE: View of Kotzebue taken during the George family's eventful air journey from the Kuskokwim to Barrow.

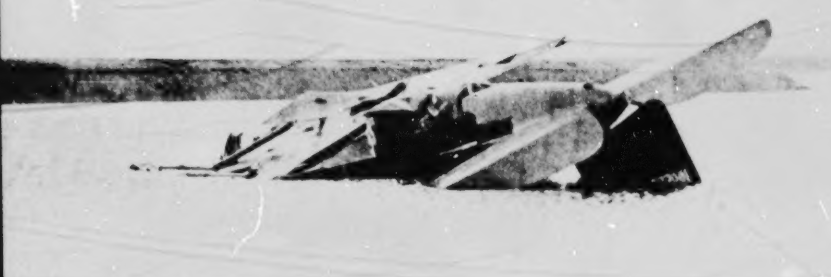
BELOW: Two sourdoughs washing for gold in Wainwright.

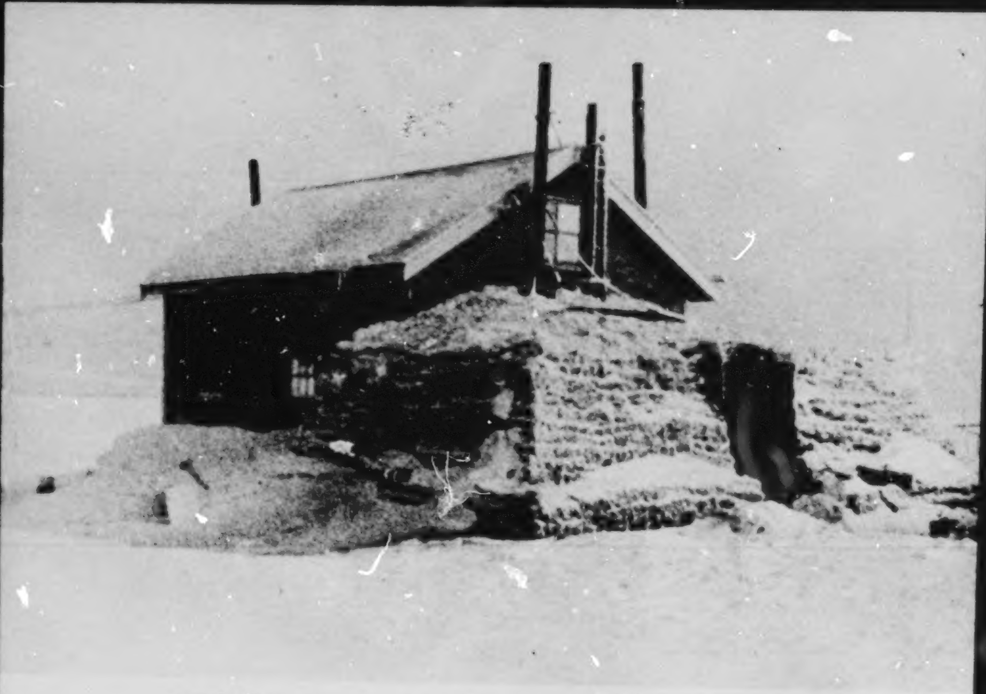
ABOVE: Noel Wien, founder of one of Alaska's pioneer commercial air services. Wien piloted the last leg of the George family's odyssey to Barrow.

BELOW: Planes at Kotzebue waiting out bad weather. Note the anchoring lines attached to the wings.



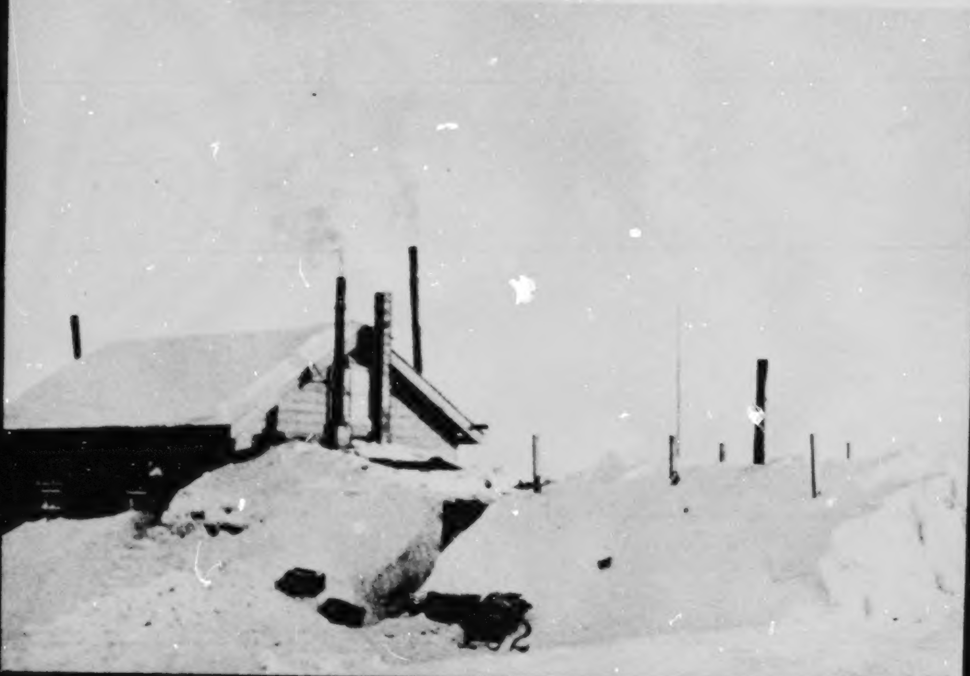
ABOVE: Barrow natives congregate around the Noel Wien Ford Trimotor that brought Otto George and his small family to Barrow.
BELOW: The wreckage of Wiley Post's plane the *Winnie Mae* in a lagoon west of Barrow. Post, and his illustrious passenger Will Rogers, died in the crash of this plane on 15 August 1935.

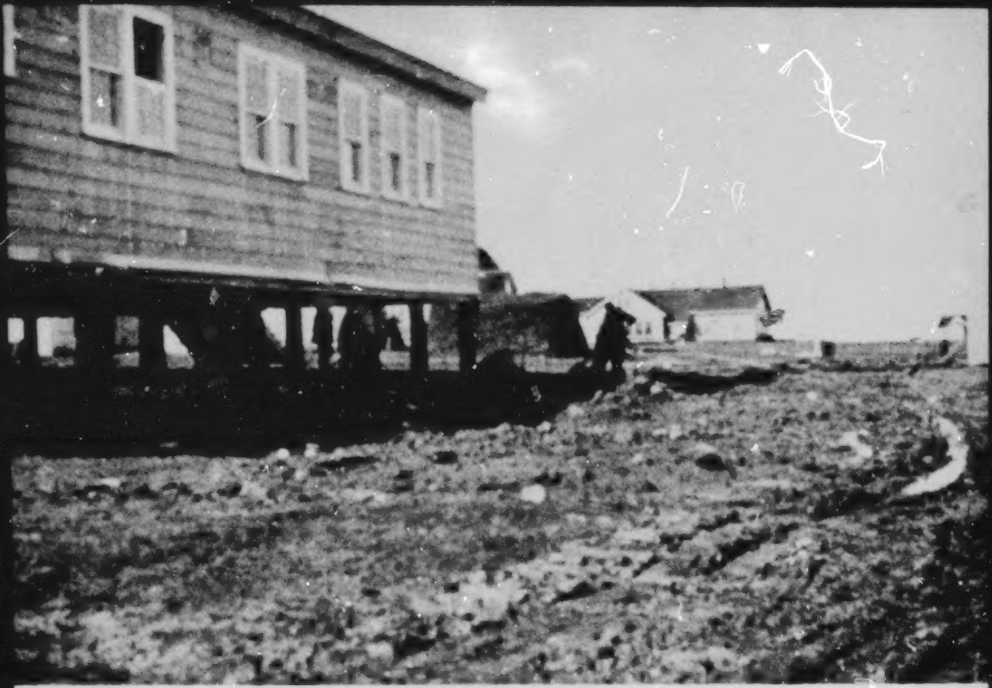




ABOVE: Warehouse used as temporary hospital at Barrow, with sod addition in foreground.

BELOW: Later view of the temporary hospital with an additional sod extension. Covered with ice blocks for the winter, this hospital provided ten beds, a cook's quarters and the doctor's office.

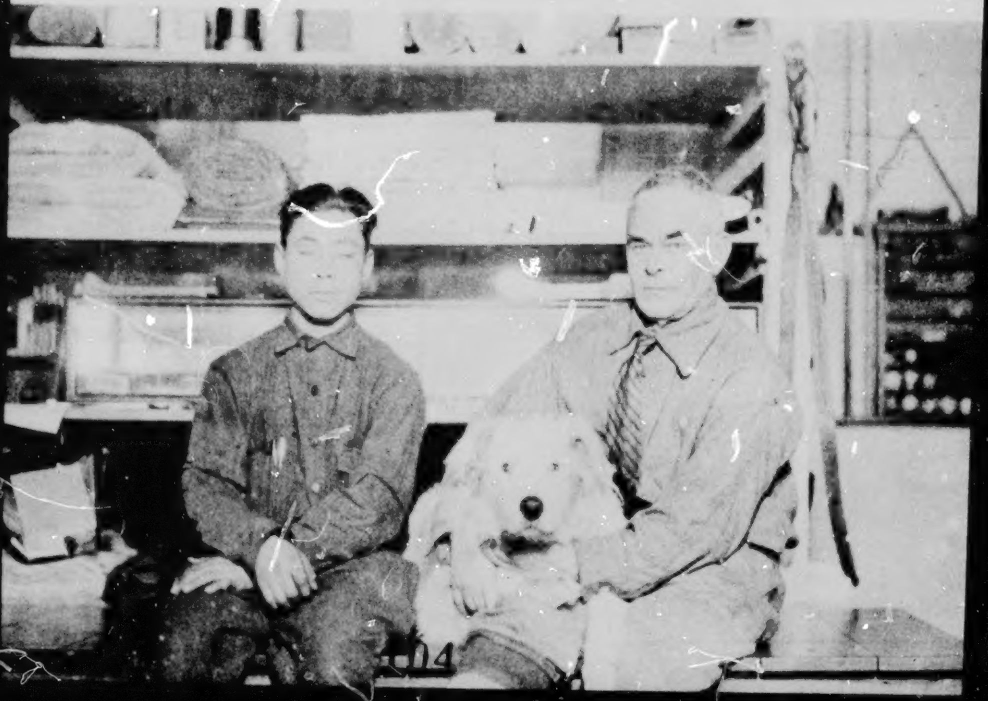




ABOVE: New Barrow hospital (left) during its construction in 1939. The building was placed on pilings above the ground to avoid winter snow drifts.

BELOW: A diffused Arctic winter moon over the temporary hospital at Barrow.

ABOVE: Charles Brower, Barrow's most famous resident; he was often referred to as the "King of the Arctic."
BELOW: Barrow's trader Charles Brower sits with a native in the Brower store.



ABOVE: View of the Brower village at Barrow.
BELOW: Trader Jack Smith traveled from well to the east to gather supplies from the *North Star* anchored at Barrow.

ABOVE: The George family enjoys a "tundra vacation" picnic on the flower-covered bluffs above the Arctic Ocean. Shown here are the two Virginias and Paul.

BELOW: The Barrow woman who gave birth to her eighth child while the other seven slept in the same tiny room.

Epidemic

One morning shortly before the Easter holiday a sledload of strange natives appeared at my door and one of them handed me a scribbled note saying there had been a death at Nunapitchuk, a village on the tundra about 50 miles west of Akiak, and that four children were ill. I could get no other information, so found a team of dogs and a driver and started at once. Since the day was beautiful, Virginia, Mary and Paul accompanied me as far as Bethel, which we reached by nightfall.

Daylight the following morning saw my driver and me far on our way to the village. The day again began beautiful, but on the tundra the wind blew a gale, whipping the snow into clouds that obscured the trail. We were on a desert of snow which extended unbroken from the Kuskokwim to the Yukon with nary a tree or twig to show the way. The trail led across many lakes and, as there were no marks on the smooth ice, tripods made of willow stakes as high as a man's head indicated where the trail entered and left the edge of the lake. My driver was not familiar with the country and I knew we could become lost quite easily here; at that time of year it could be an unpleasant experience. We had heard of a native who had recently been caught in a blizzard while on the trail. Finding a tripod he camped beneath it until the storm abated. Next morning when he looked around he found he was only a mile from Bethel.

After traveling several hours we came to a group of small wooden buildings of the trading post kept by Johnnie Samuelson, half-native son of Oscar Samuelson of Eek. Johnnie told us we would find Nunapitchuk a mile farther down the trail. This was good news as our dogs were tired and footsore. Arriving at the village we met Sam Anarak, a full-blooded Malemiut, and Mischa Ivanoff, a Russian who taught at the Tundra school. While Noah and I warmed our numbed hands at the stove, Sam talked. He told us how the Malamute dog was bred by his people. He was proud of having been a teacher for 30 years and of having been Jim Thorpe's roommate at Carlisle College. Sam had pioneered many isolated areas such as this one.

Mischa Ivanoff, married to a native woman, had taught school on Nunivak Island for five years. He wanted a transfer from that lonely place, but none came, so he built a 25-foot boat into which he loaded his belongings, his family and dogs, and set out for the mainland. He was now teaching at Tundra, a small village a few miles distant.

I was anxious to know of the nature of the sickness for which I had been called and at the first opportunity I inquired, "You have one dead and four ill?"

"Five dead and five ill," was the reply.

I thought I had misunderstood but was soon convinced we had a serious epidemic to deal with. Two days before, a child had remained away from school. Her sister explained that she did not feel well. At nine in the evening she was dead. The history of all those ill was practically the same: headache, high fever, vomiting, convulsions, paralysis of arms or legs, then death.

It appeared to be an epidemic outbreak of cerebro-spinal fever, and called for an immediate quarantine. I instructed the teachers and the trader in the matter of enforcing a rigid quarantine! All meetings were forbidden, and all visiting between villages and houses of the villages. All necessary trading was to be done in the open air. I requested that the natives proceed to their separate spring camps as rapidly as possible.

Noah and I ate lunch and returned at once to Bethel, warning the small villages on the way as well as the drivers of sleds we met of the quarantine. The return trip was hard. We now faced a strong wind that more than threatened to blot out our trail. The weather was below zero, and our 16 dogs were very tired. One by one they began to drop in the harness. As each dog gave out, he was promptly removed from the team and placed on the sled. Toward the end of our journey we had a whole sled-load of dogs! Our situation was not good. We ran as much of the way as possible, but toward night I found traveling very difficult as my thigh muscles had stiffened and movement was painful. I was certainly glad when in the gathering darkness we saw the lights of Bethel. Soon we were in the roadhouse, but I found myself so tired I could eat but little. We had traveled 100 miles that day.

Dr. Pyle, the Department of the Interior dentist for the Alaskan Indian Service, inquired about my findings and I replied that it was the real thing, cerebro-spinal fever.

"Juneau is worried," Dr. Pyle told me. "They have been wiring inquiries." Dr. Pyle prepared a wire stating the facts and asking authorization for a plane to take me to Akiak for serum and to return me to Nunapitchuk. Saseen agreed to take me early in the morning.

Before leaving, I consulted with the U.S. deputy marshal, and at his request wrote a proclamation forbidding all gatherings in Bethel and in nearby villages of the Kuskokwim. As this was close to Easter it was a disappointment to the church people as well as the natives, who were planning to hold the customary dances and festivals. The trails leading to the tundra villages were to be guarded. Mission Jim took one trail; another native called "Gasoline" took the other.

Everyone helped me get ready to leave Akiak: Virginia prepared the microscope and slides; I attended to the vaccines; Lambert, the artist, packed a box with two weeks' food supplies; neighbors carried the equipment to the plane. In a few minutes I boarded it and we were away. Sam Kendrick, the reindeer superintendent, accompanied us as a guide.

We landed on Johnson River at Nunapitchuk. I loaded my belongings onto a sled, which a native pushed down on the ice. Soon the plane was in the air again and I was alone with the villagers. I took my things to Sam's cabin as I had no other place to go. A native couple shared the room with Sam and the other room of the house was occupied by an Eskimo family of ten, making fourteen in all. After lunch we made the rounds of the nearby villages. Sam had arranged for dog teams. Other villagers turned out with their teams and sleds, apparently for the ride and to go with us to Karsalamute, the next village, three miles distant. We called the men into the open and I addressed them while Sam interpreted. I repeated the plea for quarantine. No one was to enter another's house. They were to close the kashga, speak to each other only in the open air; I advised that all strangers be kept away, that they eat well and sleep as many hours as possible. Also, they could take as many reindeer as were needed for food. They promised to comply with my instructions, thanked us and waved goodbye as we drove away. At the edge of the village we placed red flags to warn those on the trail not to enter. At Nonvarnarluk, the next village, we were greeted respectfully and promised compliance with the quarantine.

All was quiet in Nunapitchuk when we returned. The parents refused to permit their children to have the curative serum; at first they agreed, but as soon as a child protested its parents added their protest.

I visited two emaciated little girls lying with heads retracted horribly. I crawled through the passageway down between snowy walls, so narrow I had to turn my shoulders to get through. In the tunnel I passed through three doors, which were used to keep out not only the cold but perhaps the evil spirits; they kept out the fresh air as well. I attempted to administer the serum, but at the sight of the needles the girls were overcome with fright. They would crouch against the wall behind the bed; if I was able to catch one, she struggled so that I had to give up. None of the adults would help.

We again made the rounds of the villages nearby, one of which was Ivanoff's village, Tundra. It consisted of a few igloos barely rising above the snow. It was easy to guess which was Ivanoff's dwelling for there was the little 25-foot boat and a kayak before the door. We entered and were greeted by his wife and several small children. The room was poorly furnished but unusual were the organ, radio, phonograph, mandolin and violin. I asked him to play his violin for us and he complied readily while Sam seconded (none too well) on the organ. Sam and the children sang religious hymns, but I would have preferred listening to Mischa's violin as he played with professional skill lively old Russian tunes with notes lovely and wild as the tundra itself. We were served cakes and coffee; then we returned to Nunapitchuk.

When we arrived we were told that a child had become ill an hour before and died. Johnnie, the trader, wanted me to go to his house, and I hurried there. He had heard a radio broadcast from Hollywood saying I had a supply of serum. He had two small children and wanted the serum given them. I explained the serum was curative, not preventative, but this did little to quiet his fear.

During the night an old woman died of tuberculosis, and her son asked if her coffin might be built in the kashga, to which I consented. Next afternoon he placed his mother in the box at her home and just at sunset I saw the villagers gather before the house; then the box, covered with a white cloth with a red cross on each side, was placed on a sled. Two other sleds loaded with her belongings were on either side. Each was pulled by a man at the end of a long rope while the son shoved at the handlebars of the sled bearing his mother. The procession moved, all sleds abreast, a few hundred yards, then turned at right angles and, still in formation, proceeded to the cemetery, half a mile away. In the bleak, snow-filled dusk, with the wind tearing at them, I could faintly see a small group of persons standing. Suddenly flames leaped high into the air and I could see no more.

To say the least, the place was depressing. That night a child died and was buried. Two more became ill and I called on them. They had asked for the medicine, but once in the room with them the stricken girls began whining and crouched like scared animals at the farther edge of the bed, rolling the reindeer skins over themselves. It was the will of the children that I not treat them, and it was unwritten law that the parents obey them, so I finally left.

Several days had passed with no new cases reported, and I began to hope the epidemic had been controlled. I was anxious to return home. To pass the time I listened to Sam relate some of his experiences. He had been long in Alaska. For five years he had taught the Diomede Islanders of Bering Strait. These people hunted bear on the winter ice, and once they sighted an animal it never escaped. The natives went out on the floating ice in pursuit. Normally there was a strong current flowing northward there, but the north wind brought the ice floes back. The natives would go out with the current and depend on the wind to bring them back. So many natives had been lost that soon each hunter took a small skin boat to carry him from one ice floe to another. Sam considered this group of islanders more resourceful than any people he had ever seen. For example, he told of seeing one make a piston rod for an outboard motor from a piece of scrap iron, using a saw and file as his only tools, and when he finished the motor ran like new.

Finally Sam talked himself out, and I was on the verge of leaving the village when another child became ill and died. None of the families were going to their separate spring camps as they had promised they would. They had first one excuse then another. The real reason they did not go was their belief that if they seemed to run from the disease they were sure to get it. I decided I could do little by staying longer so was looking about for a team and driver when a native handed me a note from Johnnie Samuelson, which read: "Come quick; our son Johnnie has sickness!"

I walked the mile to the trader's house, hoping all the time it would prove other than cerebro-spinal fe[illegible] It was wishful thinking. Little Johnnie's face was gray and drawn. Minute red spots were appearing on the skin, the marks that gave the disease the name "spotted fever." These would later become blue, then green. It was a septicemia, but the "bug" producing the disease not only enters the blood stream but the brain tissues.

Treatment meant using a rather long, large-barrel needle to reach and remove some of the fluid surrounding the spinal cord. I found this fluid under great pressure and purulent in appearance; the curative serum was injected slowly to replace what I had withdrawn. This was a trying ordeal for the child's parents. Mrs. Samuelson drew the boy's knees up to his chin in order to arch his spine so that I could introduce the needle, while the father assisted by holding his son down firmly. Both prayed aloud as I worked and I was deeply touched.

I was having other difficulties, too. My novocaine was lost. I tried using ethyl alcohol instead, but I fear it was more to ease my conscience than to relieve the pain; although the grain alcohol was not without merit, it gave anaesthesia far longer than we needed. I soon had another worry. I was entirely out of the serum. I had sent a man to Bethel hoping more had arrived, but he became lost on the trail and arrived a day later than expected.

I estimated the incubation period for those exposed would be ten days and I planned to remain in Nunapitchuk until we were free of new cases. My particular worry was that the epidemic would spread to the river area; so I loaded my equipment onto a sled and set out the 50 miles to Bethel. We came on a quarantine guard on the trail. A mile further, at the edge of Bethel we made camp for the night, for we would not dare expose more people. I walked to the village and was relieved to hear that all was well. I obtained food for myself and fish for the dogs, and while I ate supper standing in the snow behind the Northern Commercial Co. store, Dr. Pyle and I discussed the situation. We arranged that the amateur wireless operators of the river villages would listen-in at two-hour intervals. In case of sickness anywhere, the message would be relayed and a plane would come for me.

I returned to the sled and slept under the stars, warm and comfortable; I had learned that my reindeer parka placed under my sleeping bag completely insulated me from the cold. The wind carried fine snow across my bed, and Northern Lights flashed across the sky, but I did not watch them for long; I fell sound asleep.

At daylight I got up and walked to the village and waited until I heard someone stirring inside the roadhouse, then pounded on the kitchen door. Mrs. McVeigh appeared, and soon I was eating a breakfast of hotcakes, bacon and coffee while sitting in the open on one box and using another as a table.

My driver and I arrived back in Nunapitchuk about noon, and I gave more serum to Johnnie and made the rounds of the sick. All were recovering, and there were no new cases. So, with conditions improving everywhere, I decided I would return to Bethel. Sam protested my going. The driver would not take me, saying his dogs were tired. I managed to find another team, gathered up all my belongings (including a starved pup Sam had given me), and started for Bethel.

We first stopped at the little group of houses called Pianakemute, where I examined a baby dying of tubercular meningitis, then continued on our way. The sky had grown dark and the wind began to whip the snow into the air. The dogs traveled slower and slower, seemingly liking neither the weather nor the journey away from home. My driver, too, did nothing to expedite our travel. Though a heavy man, he sat on the sled uphill as well as down.

Two hours later we sighted an airplane, and wondered if it had been sent for me. If so, there was sickness somewhere else along the river and I was wanted. I grew worried. Just then two dog teams came racing along our path. I wanted one of the fresh teams to take me the rest of the way. When I offered an additional amount of money one driver agreed. To my disappointment however, the driver insisted on adding his team to the one I already had, which would not help our slow, tired dogs at all. The new driver threw his sled on its side for a brake, loosed the main line from the sled and, holding the team with his hands, began to be dragged rapidly toward his tundra home. I grabbed for the lead dog, whereupon the whole team leaped for me. One jump placed the sled between the dogs and me. Finally the team was brought under control and was tied in behind the tired team. The reason for this arrangement was the tradition that the younger man must compliment the older one by insisting the latter's was the better team. We started on, but our troubles were not over. The main line was not up to the additional strain placed on it and snapped, the dogs going free. They made a wide swing and were headed for home. The drivers started running in an attempt to get ahead of them, and I stayed with the sled. Luckily, the dogs fell to fighting, all 12 in one pile, chewing and snapping at one another, and added to the din were the shouts and yells of the drivers. Amid the confusion I pushed the sled into the mass of fighting, snarling dogs and shouting drivers. Soon order was restored and the two teams brought under control, the lead line was spliced with dog chains, and we were once more on our way to Bethel. When we arrived I learned the plane had been sent for me, but not because of an emergency: they meant to spare me 50 miles of dogsledding.

I went out behind the Northern Commercial Co. store, where someone brought me a complete change of clothes. Outwardly clean, I then proceeded to the roadhouse and took a bath in a real tub with water carried from the river and warmed for me. Afterward I felt like a man home from exile, and felt still better as one of the men offered a hot rum to take the remaining chill from my bones. But I had not heard the last from Tundra, for after my return to Akiak there came a message relayed from the U.S. marshal which read:

> To U.S. Marshal, Bethel: Another new sick child reported this morning with the same symptoms. I wish you to notify the doctor at once and if he can come we like to have him come to treat the boy before the child is too far gone. I know he can save him. Please be sure see doctor about this matter for us. The sick child is in the same house where the two girls are sick.
>
> Samuel Anarak, Gov't teacher.

I was able to get a plane to come for me. The U.S. marshal came down to the plane to ask about conditions in the tundra villages and I admitted there were difficulties getting cooperation.

"If they get tough, tell them where to head in," he advised. I invited him to accompany me and this pleased him. Soon we were in Nunapitchuk where the people swarmed around our plane.

"How is the child?" I inquired of Sam.

"Oh, all right," he replied.

"Every one is all right?" I questioned.

"Yes, but Johnnie is just the same, he is paralyzed on one side."

I walked to the igloo where the sick girls I had attempted to treat were and found the little boy had contracted the disease. I knew from past experience it would be impossible to give the serum in the igloo but thought it would be possible to administer it at the school building. Returning to Sam, I requested he help me by opening the schoolhouse and building a fire. Sam was deathly afraid of getting sick and he wanted nothing to do with any who were ill. It was I who had gone into the igloos and who had given them the care thus far.

"Are you going to stay with me?" Sam queried.

"No, I'm going back with this plane."

"I've been sick myself," ventured Sam. "I'm afraid I will take this sickness."

I had suspected this was the reason Sam had sent for me. He wanted to have a doctor conveniently by.

At the door of the school Sam found he had no key; next he had no wood, no matches, and then no kindling. In time these were procured and Sam directed another man to come in and build a fire. I suggested it was better for the others to stay away rather than expose themselves and possibly take it home to their families. Eventually, but unwillingly, Sam built the fire.

"Now get the sick children," I requested.

"They may not want to bring them out," replied Sam.

I insisted, and Sam went out. After a few minutes he returned.

"They don't want me to bring them," he stated.

"Bring them anyway," I insisted.

Sam was desperate. He wanted nothing to do with sick children, but the marshal was standing there and Sam thought it best to go. After a long wait the marshal wondered where Sam had gone. I pointed Sam out and the marshal followed him. After a time I tired of waiting so went to see what delayed them.

"Aren't they coming?" I inquired.

"No, they don't want the medicine," was Sam's reply.

Just then two men appeared with the boy. They carried him on a reindeer skin held like a hammock between them. The two men who had carried him were willing helpers, but I insisted Sam help also, and at last he did. I gave the serum and I requested they bring the two girls. But the parents did not want the girls to have the serum. The girls would die while the boy recovered, and young Johnnie would get better. Sam and I returned to his house and washed our hands. I thanked him for his cooperation and assured him I would come any time, should he call, and we two would give the serum. I'm certain Sam never forgave me for that.

Sam did not call me again that season, nor were there more cases of cerebro-spinal fever on the Kuskokwim. However, the disease was endemic and was likely to reappear at any time. There were carriers, no doubt. I could think of no certain way of making the Kuskokwim free of it.

All was quiet again, until I received a message from Mrs. Heron:

> A boy of twelve or thirteen was found in what seemed to be an epileptic fit. He is sleeping and frothing from the mouth with typical heavy breathing. Neck is red. Eyes seem normal, legs flexed, arms relaxed, pulse good. He had no symptoms of vomiting or headache that I could gather. Have isolated and would like to know if any of the Tundra cases started like this.

I replied:

> Symptoms do not agree with epidemic. Those complain of headache, backache, vomiting thrash about then coma. Quarantine as precaution and report condition in a.m.

I learned more. The boy, an orphan called "Haile Selassie," was Lambert's "boy Friday" who did whatever he could for Lambert in return for food and a place to sleep. Ted had found him lying unconscious on the ice near the water hole, had carried him to the village boardwalk, placed him in a wheelbarrow and raced the mile to the nurse's home where she and the marshal argued whether or not to quarantine him.

That evening we listened to Peter Pringle give the news over KNX. He said:

> Now for the nightcap story. This from Bethel, Alaska. A new scare in the meningitis war occurred today. A native boy was found unconscious and was rushed a mile in a wheelbarrow to the village nurse, where his illness was diagnosed (after finding he had imbibed gin belonging to that famous artist, Ted Lambert) as giningitis. And that dear folks, is tonight's bedtime story.

After all, it was nice to know there could be some humor in the most cheerless situations.

Tuberculosis

We had expected tuberculosis to be prevalent in Alaska, but were amazed to find how serious conditions were. One native informed us: "All natives die of tuberculosis except those who drown." In Akiak we found that the houses to either side of ours had three tuberculosis deaths each during the preceding year. This condition prevailed in other villages throughout our district. The Eskimo lived in an atmosphere of constant dread. When "spitting blood," as they called it, occurred the news traveled quickly; all the village knew this or that victim was a marked person. The evil spirit had entered his body, and the finger of death beckoned and soon he would go. Day by day he grew weaker, and there was no hope he could lose the evil spirit, no escaping his fate. Eventually, no more than a skeleton, with yellowed, drawn, parchment-like skin, dull, sunken eyes peering listlessly, he could go no further, so crawled to his pallet of dried grass or reindeer skin in a corner of his hut and stirred only to brush away the tormenting flies and mosquitoes. He minded the babies for the womenfolk, until one night his spirit despaired of its wretched home and took its departure. And the spirit departed was so dreaded by the others that none showed themselves outside in the village at night for five days, until they were sure the evil spirit had gone.

My introduction to tuberculosis occurred soon after our arrival, when I accepted nurse Heron's invitation to accompany her on her rounds in Bethel. Those ill with tuberculosis lay on beds or squatted on the floor, each with a coffee can or a paper cup handy by his side. The nurse pointed with pride to some progress: one used his sputum cup; another kept his dishes separate from the others. I failed to see a solitary toilet or privy in the village, but found that all excreta, refuse from the house, sputum and all, were placed in five-gallon gasoline cans, carried to the river bank and dumped into the stream. Their water supply came from the same river and was dipped from the river's edge into other five-gallon tins.

On completion of the rounds I was mentally numb, shocked to speechlessness by realization of a condition worse than my wildest imagination. The nurse's enthusiasm at the improvements was lost on me at the time. My feeling was that we lived in an atmosphere teeming with millions of unseen, deadly bacteria with which we filled our lungs at every breath. No wonder all those living there sooner or later become victims of this horrible disease. Perhaps it was just as well that they had no knowledge of bacteria, as it would only have made their existence more of a nightmare than it already was.

That same afternoon I examined the Bethel native school children and found two with active tuberculosis. I recommended they stay home. The nurse objected, saying they would get better care in the schoolroom. I listened to her plea, but, for the sake of the teachers and the other children, insisted on their staying away. The teachers later thanked me for remaining firm.

In our village John Igwac was one of our nearest neighbors. His oldest girl had the reputation of being unusually bright and was one of the few youngsters who had finished the eighth grade in school. One day she spat blood and soon was hemorrhaging. In time she became an emaciated shadow and took to her bed, awaiting the inevitable. It was heartbreaking for us to have to watch helplessly, unable to do anything to alter the course of or stay her disease.

One night I was awakened by a loud knock on the door and on opening it found John standing before me. He wished me to see a sick child. I dressed and followed him to his home. I recognized the little boy, his only grandson, as one I had begged the family to separate from his tubercular mother, without success, months earlier. Now the boy's head was drawn to one side, the pupils were entirely hidden by the upper eyelids, and one arm and leg as well as the face twitched convulsively at regular intervals. I recognized it as tubercular meningitis, a disease from which none ever recovered. By the dim flicker of a coal oil lamp, the old folks huddled over him, looking so worried, their eyes so pleading, so helpless, that it tore at my heart and a lump I could not swallow came to my throat. I returned to our home and obtained a supply of benzoin compound and with an empty coffee can made a croup kettle. With camphorated oil we rubbed his chest, and Virginia tore up one of my woolen shirts and made a pneumonia jacket for him. We attempted to show the family we wanted to help, though we knew the child was doomed.

Next morning I hastened to see the little one, crowding through the little stormshed so filled with sled dogs I scarcely had room to dodge their snarling jaws. For the first time I found how ten to twelve Eskimos managed to sleep in one small room. The tubercular mother lay on a mattress supported by an old iron bedstead. Two girls were up preparing for school. The grandmother evidently had fallen asleep while holding the sick child, who had slipped from her arms and lay on the bed. Just inside the door was a reindeer skin, and on it lay the old man and two small children, fully clothed. From behind the door sprawled a pair of legs belonging to the eldest son of the family, who also had advanced tuberculosis, while a little orphan boy of six lay on the bare floor without anything but his clothing. None of the sleepers wakened, so I departed quietly. On my way out I stumbled over a large pan containing their intended breakfast, raw fish heads, slimy, unwashed. This final touch was in keeping with the rest of the surroundings, something I could never forget.

The child with meningitis gradually became worse. One midnight the bell in the church tolled; the malamute chorus swelled upon the night. All knew that death had come to the village, that an evil spirit was abroad, and made fast their doors and stayed inside. Virginia and I guessed it was the child who had died, and while we knew there was no more we could do I dressed and walked the few steps to our neighbors' house and entered. In the dim light I could faintly see. The child was not on the bed, but, dressed all in white, was laid on a box in the center of the room. This was the third death in that house within the year, all from tuberculosis; two of those remaining were ill with the disease.

In the house on the other side of ours, Mrs. Daniels, a widow with six children, had buried her oldest son Tommy the previous week. The six remaining lived in this little one-room log house where they all had been born. I noticed the cracks were chinked with bits of rags and reindeer skin to keep the cold out, and paper, heavily laden with dust, was tacked to the walls. The same reindeer skins used by the sick served as bedding for everyone.

By then we were convinced the natives' greatest problem was tuberculosis. But we did not have the answer. Sometimes we would argue these people should have been left in their native state, that along with education we brought them disease. We, in our colleges, give degrees to students of anthropology, mythology and study of the ancients. Why not encourage these people to carry on as their fathers did, which permitted them to exist through the centuries in such an unfriendly land? The other side of the question favored hastening their education; educated Eskimos could be on a par with their white brethren. Our civilization as we know it in the

States would sooner or later envelop this territory, and so we must look to a new way of life and hasten it as much as possible.

Each year the natives in the Kuskokwim villages went far up the river to cut spruce logs that they floated down the river to be sawed into lumber and firewood. I suggested we use the logs to build new houses and use the logs of the old houses, which we would tear down, for fuel. The more I thought of the plan the better it appeared to me. I would discuss the idea with those I thought most likely to favor it. There were two or three strong, grown boys still living in a house where so many had recently died and I thought they would be interested, not only for their own health but also for the others remaining. Virginia agreed the plan was a good one. Accordingly, I called them in, and, after reviewing the health situation to them, suggested the remedy. One man told me I was not the first doctor who had the same idea. One doctor had become so provoked at conditions that he set fire to one of the infested houses, burning it to the ground. While some agreed it was a good idea, their reaction puzzled me. None seemed to favor it, and I grew more disheartened. The reluctance of the natives came not so much from the work of building or the age-old superstition against showing fear of the bad spirits as from their desire to have the buildings built at government expense. They could see no reason at all why, unless my contrary nature prevented it, this was not done for them. "The government," it seemed, was a vague somebody with an inexhaustible money supply and one that I could call on at will—and did—when I wanted supplies or transportation. So why ask them to work without pay?

One day I passed an old building that had windows and doors. I managed to open the lock and was surprised to see that the building was in pretty fair condition compared to the remainder of the village. There were cooking utensils, a stove, and bedsteads. This, I decided, was what I had been looking for. I estimated ten persons could be accommodated and that would include those most in need of isolation. All we needed were fuel and food. We could use slabwood from the nearby mill and the families could provide food.

I lost no time in wiring my superior in Juneau and he gave permission to use the building, only reminding me there was no money available for the natives' care. He did not object to the villagers making it a community effort.

I called the villagers together to see what they thought of the plan. Their faces were friendly but curious. I told the purpose of the meeting, explaining the problem they all faced. I cited the appalling death rate and reminded them there were persons among them who knew their village when more than 400 people lived in it and that it had dwindled to 150; that there had been several villages between Akiak and Bethel that had entirely disappeared. I spoke of the present death rate, and the prediction I had heard that the Eskimo would disappear within a few years.

> Seven of you have died in less than three months; only one did not die of tuberculosis, while but one child has been born. For years the white men have been among you, trying to tell you the reasons for these deaths, and that you need not die, but you will not heed them. Some say the whites brought you the disease, but neither you nor I know of one single white man with it.

Then I explained the offer of the house and told them how simple it would be if all their bedfast were in that one house. I spoke of the proximity of the fuel to the house, of the beds and stoves, and how we could care for the sick. When I had finished I looked at those before me. Their faces were blank and expressionless. There followed a long pause; then there were questions asked: "Would the government do this?" and discussion in their native tongue. At last they spoke: "No, the government must do it all." We could not believe they were serious. The way seemed so clear to us. We explained again, but the natives were not impressed and went away.

I continued to campaign against the disease at every opportunity and especially when a death occurred. "You must build a new house as soon as possible and tear the old germ-laden one down," we would tell them. But they *knew* what spirits were, and germs meant nothing to them. We grew weary for we knew that without authority, and likewise without funds, it would be a long time before we could hope for improvement.

Since we had permission and they were fairly clean, we began using vacant houses. If the sick would not live in the radio shack, we could put the healthy families in it. Accordingly, Mrs. Daniels and her brood were moved to the shack. A little house belonging to the Reindeer Service needed little repair to make it livable. I started to repair it and, as curious natives came to investigate this new activity, they stayed to help. We not only repaired the building but placed an old bed and stove in it and made it otherwise livable. We built other small buildings that contributed to sanitation, carried slabwood from the mill, and made a sawhorse. The men worked as if they enjoyed it and none left until there was nothing more to do. I was encouraged.

When, days later, word was brought that an orphan child was ill, I investigated and found a slender girl, still in her teens, suffering from advanced tuberculosis. Her place in the household was that of any orphan taken into a family, that of a slave. She was unable to work, which was the reason for my having been called, I suspected. The little house we had prepared was next door to her home. I gave her permission to make it her home, and she promptly moved in. Virginia and I were able to let her have some old bedding and some food. We did not mind doing this for it meant that we had separated one with active tuberculosis from a whole family.

A few mornings later I answered a loud knock at the door and on opening it the little girl stood before me holding something white, wriggling in her fingers. She was crying and shaking with fright, so it was some time before I could comprehend. She had been awakened from her sleep by a round worm which she recovered from her nose and, frightened though she was, she brought it for me to see.

Now I suspected that much of this girl's emaciation was due to the presence of the worms as well as to tuberculosis. Since the main diet of these Eskimos was fish, raw or dried, I began to suspect this type of infection might be prevalent. I wondered how much improvement in this girl's condition could be expected from treating her and ridding her of these parasites, so gave her food and medicine, taking great interest in her welfare.

My territory being large, I was obliged to be away from Akiak much of the time, and, following a rather protracted absence, I received a visit from the girl. There was a scowl on her face, and when she spoke it was to berate me. I had not provided her with food, and she should have more fuel, a better bed, more furniture, etc. Apparently the girl, as well as everyone in the village, felt she was our ward. Everything in the school and hospital was free to them. They came into our dispensary for drugs, even to have their babies. Why then, should I, the "government," or part of it—to them—deny this one individual? They would probably complain, or report us for our negligence. We continued to care for her. We knew their reasoning. An Eskimo could not deny sharing with another. The native custom permitted those without to move in with those possessing food, and stay as long as it lasted.

I visited the lower river country and the tundra villages where dwelt Alaska's most primitive natives. I was greatly surprised to find these the most robust, healthy and disease-free of all I had seen anywhere. They were likewise the poorest in worldly goods. Only occasionally did I find one with tuberculosis. Week after week I stayed in these primitive villages, studying them, examining, comparing, pondering, attempting to find the reason for their good health. The answer was obvious. The white man's civilization had not yet reached them and changed their way of life.

The primitive Bering Sea dwellers had lived for countless centuries exactly as we found them there, distributed along the seacoast and inland streams according to the availability of food. The reason for their health was their mode of living. In summer they found food in abundance in the ocean, the streams, on the tundra. With the coming of the cold they returned to the site of their last year's home and began preparation for the winter. The sod houses of the previous year either had been washed away by the river or had collapsed.

Construction of a new house was simple. Driftwood was gotten from the beach and hauled by dog team. The spongy tundra sod, composed of mosses, lichens and grass roots, was cut into squares. Logs and poles were placed to form a crib-like framework (or pen) about eight to ten feet square, and the sod was placed on the sides and top. The winter snows then covered the whole structure. The sod igloo was warm and comfortable and each became the home for two families for the winter months.

During the cold weather fuel was scarce, so the wooden walls were hacked away and burned (the frozen sod walls needed no support then). With the coming of the first warm days the snow began to melt and drip through to the floor of the sod igloo. It was time for the natives to move to spring camp, leaving the dirt of the past winter, as well as the old folks (those too sick or weak to walk) and the old dogs, in the sod house. When the warm weather and the resultant spring floods came the igloo, the old, the ill and the lame were no more.

In the fall, after the months of basking in the sun, eating and exercising, the family returned to winter camp, bodies blackened and weathered, in excellent health, again ready to build a new and clean winter home. The percentage of ill among them was small, almost none.

Now comes the white man's civilization, the government workers, and the missionaries. It is an old story. Their first reaction is pity and sympathy for the natives' lowly state. They must be helped to a better life. The old order must change. A school is built as soon as possible, and government workers do the task. The native is brought out of the underground hovels and lives in flimsy wooden houses (all too well ventilated, but above ground), and the native is introduced to new, strange foodstuffs. Life is different—easier, perhaps. But store-bought clothes are not so warm, and the starchy food causes teeth to decay. Now the winter houses are permanent. There are other changes. They no longer leave the weak to perish, because those ill with tuberculosis remain in the houses all summer. When winter comes the healthy people return and move in with them, into a house already filled with tubercular germs. The percentage of those ill with the disease is in direct proportion to the length of time since civilization overtook them. This was the picture I saw. I wondered why I had not seen it clearly before.

Doctor George and his sled driver about to leave the village of Kwigillingok.

Stampede

During one of my visits to Bethel I called on the dentist to have some work done. His office was a one-room cabin where he also cooked and slept. He told me that he practiced dentistry only for a grubstake.

While he was filling one of my teeth he told me how he had been rich two or three times, naming mines he had developed and sold, and how much money he made on each transaction, and how bad business deals had taken his profits each time. He was low just then, but thought fortune was again just around the corner. Perhaps this would be the last tooth he would ever fill, he said, and went on to reveal his secret.

He had many mining leases, and there was gold from grass roots to bedrock; he had seen for himself. From a can hidden behind some papers in his dental cupboard he produced several small bottles filled with fine and coarse gold, explaining the high quality of each. But he needed capital to go to California to promote the development of his property. For $1,000 he would share his interest with me on a percentage basis. I apologized; he had misjudged me. I was not a man of wealth and knew nothing of mining. Nevertheless, this offer helped spark the gold fever in me.

Back in Akiak, Mr. Oman of Quithlook called. I mentioned that the Andersons (who had lived in white Akiak with their families for many years and were fine, wholesome people) had a mine on Canyon Creek, the headwaters of the Kwethluk River. Each spring they mushed in with dogsleds and, with pick and shovel, took out enough gold to support their families comfortably throughout the whole year.

In the past they had hired a few natives to help them operate their mine. In addition to paying them money, the Andersons filed claims for them. The news of the Bethel dentist going to California to interview officials of the Uba Dredge Co. and other mining operators caused quite a bit of excitement. The natives holding the claims adjoining the Andersons' sold theirs to Mr. Carlson for $1,500, and planned to go back, taking friends with them, and stake the remainder of the creek.

Canyon Creek was near the claim the dentist was trying to promote in California. The proven claims were at the head of the creek, and more than $150,000 had already been taken out, using only pick and shovel. The ground farther down the creek was possibly just as rich in gold, but more dirt overlay the bedrock that the gold gravitated to. Dredges were used to recover gold under such circumstances, and because of the great expense involved it called for persons with large financial resources. The Andersons and Oman were not anxious to have these claims fall into the hands of persons who might hold or involve the ground in any sort of legal difficulty, which could endanger the development of the whole project.

The natives planned to go by dog team. Mr. Oman invited me to go with him and the Andersons by plane to file on the ground before the natives could. The natives, he believed, would not make the trip in less than five days. They lived at Quithlook, his own village, and he expected Mrs. Oman to observe their movements and inform him, should they leave. He hoped they would feel there was no hurry and would wait for more favorable weather before starting.

The next morning I was awakened by a plane taxiing to the riverbank below, and a voice called out, "Are you ready?" My sleeping bag and another bag containing a few cooking utensils and food were always packed and ready. While these were loaded into the plane, I gulped a dish of oatmeal and a cup of coffee, bade Virginia farewell, and ran for the plane.

I had never met the pilot, a man named Call. He had paused in Bethel on his way to another village and had been persuaded by Mr. Oman and Anderson—with the promise of two mining claims for himself, in addition to his regular flying rate of $45 per hour—to fly us. We taxied back across the ice and were joined by one of the Andersons and two pilots (Peterson and Stranberg) temporarily without planes, making six in all. We took off and headed east toward the mountains. Soon a string of lofty peaks reduced those of the Reindeer Hills to mere mounds by comparison. We followed the course of the Kwethluk River. After an hour had passed, the third range of mountains, the Kilbucks, appeared and I observed these were higher and even more rugged. The pilot began to circle in search of a suitable landing place, and decided to try a smooth-appearing area at the foot of a glacier. Tundra may look level and soft from an altitude of 5,000 or even 500 feet, but anyone who has traveled on foot knows differently. Moreover, it was difficult to determine the direction of the wind, a prerequisite for safe landing.

After circling repeatedly, the plane leveled off and began to lose altitude. The objects on the ground began to race by faster and faster as we came to earth. I could see hillocks of grass, and alarmingly large lichens. The plane's skis touched, bounced, touched again, then we began to lose speed. An especially hard jolt forced a grunt from me. Just as I began to wonder if we were to stop or continue over the level and down the mountainside we came to a stop. We all climbed out and anxiously inspected the plane. I expected the tail skid to be missing or broken, but there was only a sharp angulation of the metal frame of the fuselage directly under where I had been sitting. We considered ourselves fortunate.

Our snow-crusted plateau and nearby glacier afforded no protection whatever from the wind. There was no wood or growth except some small twigs less than a foot in height, and we were anything but comfortable. Leaving the pilot to care for his plane, we walked to the little creek below us. Mr. Anderson led the way over the ice filling the gorge. He used a strong willow pole to strike the ice ahead of him and test its strength. The water beneath us was deep, swift and cold. We walked for an hour and a half before reaching the corner stake on the mountainside a few feet above high-water mark. We inspected a notice in the tin can attached to the stake, took a compass reading, and set our first stake beside this one and downstream a few inches.

Our stake was fashioned from a green willow, squared at the top with an axe to permit writing. This was the initial post, marked Stake Number One. Our notice was placed in a tin can and nailed to the post, bottom up, with the lid closed to prevent the paper from dropping out. Next we measured off 1,320 feet and placed a similar stake, on which we wrote "Stake Number Two." Since we could not cross the creek at this point, we cut another stake and marked it "Number Three," with the claim number, distance and directions to the other corners of the claim. This was placed beside the initial post and just inside it. The Alaskan mining law gave 90 days to get that post in its proper place.

Often it was necessary to cut three stakes and make a tripod, to which the post was fastened, the ground being too rocky or icy to dig. Mr. Oman did the measuring, pacing the distance. I cut and carried the stakes. The two pilots (Peterson and Stranberg) marked and inscribed the notices, and Anderson set the posts. Often I had to go a long way for the poles. The snow-covered boulders and the footing were very treacherous. I carried the armloads of stakes as best I could but often slipped and fell in the snow. It was hard work for all of us.

We hoped to finish in time to return the same day. The pilot came down and signed his filing notices and returned to the plane. At dusk we were only half through and very tired; the high altitude and deep snow were responsible for this. I recalled that I had not eaten since morning and wished I had eaten more then. Peterson went to a cache at the top of the hill and returned with some hardtack, a doughnut and a small can of sardines for each of us. We ate in silence, but our strength restored, we all fell to work again. The full moon rose above the canyon wall and gave more light than the retreating sun.

Mr. Anderson suggested we stop, but the younger men wanted to continue. There was sufficient light from the moon by which to write their notices. I, too, preferred working to sitting in the cold beside the plane. I renewed my chopping with increased vigor in order to keep warm but, being unaccustomed to such hard work, soon tired. Wading in snow two and three feet deep was tiresome work, and time came when I could take but two or three steps before resting. Eventually we finished.

Returning to the plane we found the pilot in bed. He had scooped a hole in the snow and the top of his bedroll was on a level with the surface of the snow. He had cooked a pot of rice, using the firepot for a stove. This was frozen so we again lighted the torch and brought the kettle to a boil. Melted snow afforded water for our coffee, and soon we were making a meal of rice, bread and corned beef.

After dinner, there was nothing else to do except endure the wind and snow which whipped our camp, and we unrolled our sleeping bags and retired. After loosening my clothing and removing my mukluks, I was quite comfortable. The two younger men shared the same sleeping bag, both crowding into it, and they argued. They could not decide whether to undress or sleep with their clothing on. Finally Call, apparently disturbed, bellowed, "You b–tards shut up and go to sleep." Afterward there was silence.

Many times I peered from under the flap of my sleeping bag, hoping to see above the ghostly mountain peaks the glow that would foretell the dawn, but clouds hid the moon and stars. Only after a very long night a faint glow in the east silhouetted the jagged teeth of the mountain range. The coloring of the sky became increasingly beautiful. Blue mountains with a sky orange, yellow and pale green, fading to deeper green and blue with red clouds above. By night the view had been inspiring; with dawn it was beautiful beyond words. Realizing that I must soon get up, I dozed contentedly.

I heard a roaring noise that sounded as if the wind was rising. I peered out to see if the plane was in danger. It was only Peterson with the firepot, melting snow preparatory to making coffee. I hurriedly arose and we cooked a kettle of oatmeal and were about to eat it when Mr. Oman produced a tin of milk which was unfrozen because he had thoughtfully kept it inside his shirt throughout the night.

Breakfast over, the firepot was placed under the tent-like engine cover, then under the oil which was added to the engine. Meantime we placed our bedding in the plane. The pilot taxied back to the spot where skis had first touched and, while we watched anxiously, took off. It was evident to all of us that a loaded plane could not rise from that field. The pilot was searching for a lake, and we watched to see where he landed. We saw him circle to the north, dip his wings in signal, then drop from sight. We hastened to follow and, after walking about a mile, came to an ice-covered swamp that afforded a smooth runway for about 1,500 feet, which our pilot thought suitable but about which the two other pilots were very dubious. The pilot was in charge and he told us to get aboard. The bend in the fuselage was noticeable now as we all climbed into the plane. To keep the sagging at a minimum, the heavier passengers were told to sit in the front. Being heaviest, I pulled off my parka and squeezed into the seat beside the pilot. Three of the others sat on the baggage with their backs pressed against the front seat, and the lightest one sat in the rear seat.

Thus arranged we started, throttle wide open, engine roaring. At 100 feet from the end of the lake the pilot pulled back on the stick but the ski did not leave the ice. Just ahead the ground appeared very uneven, but there was no chance of our stopping. Throttle wide open and the plane gaining speed, boulders large as a house just ahead seemed to rush toward us. At the very edge of the ice pilot Call tried again, the plane responded, and we bounded into the air, barely above the great boulders reaching for us; we breathed again. Had that attempt not been successful, one of the pilots remarked that the plane would have rolled into a ball of tin, and none doubted we had had a close call. We all felt relieved and happy at our safe return and I, for one, admired the ingenuity, skill and nerve of the pilot.

This brought to a conclusion my first participation in a gold rush, or stampede. We expected the natives to reach the creek that afternoon. They would be surprised, no doubt, but they could file on land adjoining ours, only farther downstream. Each of us had filed two claims, as permitted by law. Five of us filed two additional claims by power-of-attorney; twenty-two claims covered a distance of almost five miles of creek bed below the Canyon Creek gold mine, thus giving the owner of that mine the protection they sought.

Jim Moses, Dr. Otto and Paul George sit on the front steps of the George house in Akiak.

North to Barrow

We had become accustomed to a life of uncertainties and surprises such as befall a traveling physician, but were hardly prepared for the one that came in early April, 1937.

Spring was in the air. The snow was turning to slush. The buds on the willows were bursting, and the natives were looking for geese. I had spring fever and was removing the storm windows from the house and converting them into a greenhouse when Sig Hapstead, the radio operator, brought a message for me.

> Would you accept immediate transfer to Point Barrow Hospital at forty-six hundred dollars per annum less six hundred sixty for subsistence and lodging with transportation paid by Government requesting appropriation for construction of new hospital meanwhile medical work being continued in improvised quarters? Please radio reply and state earliest date you could leave Akiak.

I went into the house to show the message to Virginia. She read it, then looked at me inquiringly, saying "Well?"

And I, too, asked, "Well?"

"We have seen about all we will see here," Virginia speculated. She then turned to Mary and asked, "Will you go with us, Mary?"

Mary did not decide for a time, but after thinking it over seemed as enthusiastic as we were when we sent our acceptance. News spread of our departure, and the natives held a meeting to discuss means of preventing our transfer.

I needed to visit Bethel. Several people there expressed their disappointment at seeing us leave for Point Barrow. This made us feel both good and bad. At Bethel we tried to obtain all the information possible about our new home. Mr. Hall had been there and said it was very desolate and isolated. We were told so much against the place (750 miles and almost directly north of Akiak) that we were almost sorry we had accepted the appointment.

We received a wire promptly from the Juneau office of the Department of the Interior, asking if we could have our family and baggage in a plane within a day or two. We replied that we were ready to leave immediately.

A few days later, about 4:00 p.m., we heard the motor of our chartered plane. I walked down to meet the pilot, surprised to see he had several passengers that he intended to take to Barrow with him.

"I think we might as well go as far as we can," was his greeting.

"So do I," I replied, hardly realizing he had meant *then*, during the squally weather.

The day was late, and we scurried around, Virginia and I, assisted by the natives. I had sorted our belongings into three separate places: the light but bulky things, such as clothing, to go first; books, second; groceries, third. We could only load the first pile of personal belongings, in all only a few hundred pounds (not the 1,500 we had been promised). The extra passengers, along for the ride to add to the pilot's receipts for the trip, greatly limited our baggage space. We had to leave all magazines and most of our books, besides all but a few cans of milk, although we had set aside a full case of it for our son. I took the pilot aside and asked him if this was not a government-chartered plane, and if he thought it proper to have all these passengers when my books and our baby's milk had to be left behind.

"Well, unload your stuff, then," he replied. "I have enough work here without going up to Barrow."

There was no point in arguing with him. We would have to accept his plane or remain at Akiak until after the breakup. We could not make him keep his agreement and we did not want to have controversy, or news of such, reach Juneau or Washington. Leaving the boxes of books, our skis, food, even our overcoats, on the river ice, we climbed into the plane. We never saw our belongings again.

The snow was sticky and it was hard to get the plane into the air. Finally we were up. The black spruce of the Kuskokwim grew smaller and more sparse. At last all beneath us was snow-covered tundra. Below flew wild geese; clouds were above and all around us; snow-covered mountains rose to the east, fog banks to the west. Soon the snaky curves of the Yukon came into view, we turned west and for almost an hour we followed its course downstream. The Yukon appeared small, smaller than our Kuskokwim. There was a main channel with many smaller channels winding in great S curves through the tundra. As the clouds closed in we began to lose altitude and settled to a landing at Mountain Village. One ski sank through the snow and we narrowly averted a ground loop, but no damage was done.

Virginia, Mary, Paul and I went directly to the hospital and introduced ourselves to Dr. Maurice Corthell and his wife. The hospital nestled above the river at the foot of a hill. A little Catholic church, the native village, and the trading post lay in the valley below. A narrow boardwalk extended from the hospital to the store. There, as in Bethel, all houses were along the upper side of the walk. The hospital had 16 beds, but often accommodated 25 patients. The living quarters for the two nurses and the doctor were in the attic. One bathroom served both the nurses and the doctor's family.

We were very comfortable at the hospital and awakened fresh and eager for the trip ahead. Taking our leave of Dr. Corthell and his staff, we were soon up and on our way through the clouds, with mountains to the east and Norton Sound at times visible to the west of us. Dodging over and under the clouds we went, all the time keeping in view the stakes that marked the dog trail northward.

By noon we were flying in increasingly dense and lower clouds. On the seashore we saw stranded vessels, ocean schooners, either deserted or beached for the winter. By afternoon we were over a large village. One building, painted green, bore the word "Unalakleet." We circled many times, for we could not locate a landing field. There seemed to be stumps or driftwood wherever there was level ground. At length several men walked out and marked a landing field for us in the deep, wet snow. Our pilot made a smooth landing and we taxied up onto a slight elevation near the buildings. The whole village turned out to welcome us.

We alighted from the plane and all went to the store and waited while they decided who should take us for the night. We accompanied Mr. Swenson, the teacher. After a light meal, I went with the village nurse to see several sick children, two of whom had enlarged thyroid glands (the only time I saw this condition in Alaska), five were tubercular, a few had syphilis, and one or two had gonorrhea. In the village there were about 340 natives and a few Lapps. All their homes were very clean. The villagers all spoke excellent English.

Once during the afternoon we heard another plane. The teachers were expecting Mr. Hurst, chief of the Bureau of Education, from Juneau. This was his plane. I walked down and became one of the welcoming committee, which consisted of almost everyone in the village. Mr. Hurst, Mr. Beatty, director of the Bureau of Education, with headquarters in Washington, D.C., an engineer, and the pilot completed the party.

Mr. Beatty and Mr. Hurst decided that the engineer should go with us to Barrow in order to draw plans for the new hospital to be built there. That meant we must remove more of our personal baggage to allow for his weight. I rearranged the baggage, leaving what clothing we could spare and the few medical books we had managed to bring. Then we walked about inspecting the village until dusk. I was surprised to find it still light at 10 p.m. and not entirely dark at midnight. About 8:30 the next morning we said goodbye, and Mr. Beatty assured us we were going to the best station in all Alaska. We climbed into our plane and taxied out through some stumps sticking up in the snow. Soon we stopped. I had supposed a ski was fast on a stump, but it was only that the snow was very sticky. One of the natives suggested that everyone get out of the plane, which we did; then the pilot taxied the plane back and forth, packing the snow for a runway. Then we climbed aboard again. For a time it appeared we still would not take off, but at last we were in the air.

We headed north across the narrow neck of Seward Peninsula, and near noon we sighted Kotzebue and landed. From the air the village appeared as a small group of houses on the bank of a bay or lagoon, and only a few feet higher than the ice. An unusually large cemetery was beside the village. One building, more outstanding than the rest, was the government hospital.

We left the plane and walked toward the nearest building. A sign proclaimed it to be "Paul's Place." The snow was piled to the roof and we entered through a snow tunnel. "Paul's Place," we found, was a roadhouse kept by a white man named Paul and his native wife. The room we entered was the main dining room. There were a table, chairs, a pool table, and in one corner a bed, where Paul himself was lying, laid up with rheumatism. A shed room housed the kitchen. A stairway led to the floor above. We ordered lunch. Paul informed us it would be an hour in preparation, so Virginia and I walked the mile to the hospital. It was a gray, two-story building exactly like the one at Mountain Village. We introduced ourselves to Miss Jensen, the first nurse we met. She took us to see Dr. Smith, who had some medical supplies for Barrow. We were shown through the hospital and given the supplies, then returned to the roadhouse. For lunch we were served some very fat and greasy "she fish," a delicacy we were told, but they were too oily and soft to please us.

After a short rest we got into the plane and headed for Barrow. We flew for a time over beautiful country, following the Noatak River, flanked by the DeLong and Baird mountains on either side. At first these distant mountains were rugged and beautiful, but soon we were flying up Noatak Canyon between sheer rock walls, often so steep that snow would not adhere to them. Clouds were above us, sometimes hiding the mountaintops. At times our plane appeared to be flying into a solid mountainside, but each time as we were about to crash we would wing over and turn a corner. Sometimes it appeared that one wing could not help scraping on the projecting rocks. We could only hope we were not in a blind canyon. The pilot had never been through these mountains, so we felt we had reason for uneasiness.

At first the engineer was thrilled as we came nearer and nearer the mountainsides. He had a movie camera and took pictures. After a while he sat down, fixed his eyes on the plane's ceiling, and did not again look out.

Our mechanic would peer first out one window then out the other, then sit down and hold a paper sack above his face. In the sack was a bottle. The narrower the mountain pass became the more nervous he appeared, and the more often the sack was applied to his face. As we proceeded the air grew bumpy. Virginia was quite uneasy and I was afraid she was sick. At last we observed that the streams below flowed northward. We had passed safely over the low western end of the Brooks Range and were on the Barrow side. All heaved sighs of relief.

Below us were great rocks scratched deep by old glaciers. These striations extended as far as we could see in all directions. We had flown two hours when clouds closed in about us. There was no alternative but to return to Kotzebue. The plane banked, circled, and we turned back through the forest of mountain peaks and clouds. All the passengers were visibly ill at ease, to say the least. Again we hoped the pilot would not fly into a blind canyon. The engine slowed when at last we were through the mountains and over the rim again. Hours later we were back at Kotzebue, happy to be safely on the ground. Virginia was sick with abdominal cramps. Paul was worn out.

We were guided to the home of the U.S. deputy marshal.

Virginia was there in the company of one of the teachers and his wife and one of the nurses. As it grew late the women took their leave, but at the insistence of the others I remained. They wanted to tell me about Barrow. The people of Kotzebue were bitter toward Barrow. Because of its geographic position at the top of the world, Barrow never overlooked an opportunity for publicity. Only recently one of its citizens, interviewed by a popular magazine, had claimed that Barrow had the only bathtub within the Arctic Circle: a statement much resented by the citizens of Kotzebue, for Kotzebue was within the Arctic Circle and had seven bathtubs.

At this, the deputy marshal, who had been drinking beer in silence, joined in the conversation, and a little later set out a lunch of crab, pickles and beer. We ate and the conversation became less formal. Our engineer began to recall his younger days. He had meant to become a surgeon, but unfortunately, at his first sight of an operation he fainted. His family was disgusted with him and sent him away to study art in Paris. He later studied at Heidelberg where he fought 20 duels with swords and pistols. He demonstrated his swordsmanship, holding an imaginary foil in his right hand while with the thumb of the left he clutched his trousers belt in the rear, dancing and thrusting about in the middle of the room. Then he removed his shirt so that we might see the scars on his chest, and called our special attention to those over his heart.

The engineer paused and the deputy marshal began. He had had an adventurous life and many close calls in his law enforcement work. He, too, removed his shirt, and then downed his trousers to show us all his scars. Not to be outdone, the doctor pulled off his shirt and exhibited his scars. The others could only stand in awe. The doctor's abdomen was a patchwork of scars. I observed there was little room for another one. One across the right belly was for his gall bladder, one for his appendix and others for reasons I did not learn. I had no scars, so kept my clothes on.

An hour before noon the following day we were in the air. It was beautiful and clear. We were sure we would make Barrow without difficulty. We flew an hour up the river between the mountains, then turned sharply. We were flying higher this time and seemed to cross the divide sooner than the day before. We saw the glacier-scratched rock below and, finally, to the northeast saw haze, then a fog bank. Again the plane circled and turned back. Once more we recrossed the peaks.

We dared not think of having trouble there. Again we landed at Kotzebue.

To pass the time we joined the natives fishing through the ice for tom cod. A three-pronged hook without barbs was dropped through the ice into the water. Enough lead was attached to cause the line to drop 12 to 15 feet. The line was suspended by a small stick which was jerked up, then lowered or "jiggled," as they called it. When one was hooked, another stick was used to wind up the wet string. When the catch reached the surface a flip of the string freed the fish, which dropped to the ice, where it flopped once or twice, and then quickly froze. The natives caught fish rapidly by snagging them in this manner. We persuaded the natives to let us try our luck at the sport and after a time we became quite adept at jiggling. We caught enough for ourselves and some for the hungry dogs that stood close by. For supper we had the cod and smelt we caught.

Virginia became quite sick with cramps, and as she was pregnant we were apprehensive. Paul became sick, too, and began vomiting. As night wore on Virginia improved, but Paul's conditioned worsened. He vomited constantly and he developed a high temperature, which alarmed us. Virginia held him and sobbed and I tried not to think of the bleak graveyard beside the village.

We kept to our quarters in the roadhouse. Our second-floor room was encased in snow and for ventilation we had to leave the door ajar, though there were cracks in the walls permitting us to see into the one adjoining. We closed the door because of the singing, dancing, loud talk and a noisy piano which continued all night long, interrupted only by callers who thumped on our door until I opened it. Practically everyone in the village came to see us. Finally at five a.m. I dressed and went downstairs and prepared a bottle of formula for Paul. Coming upstairs I saw three men peering into Mary's room. I yelled, "Get out of there," and they staggered on.

The weather was disagreeable and it appeared we were not going to fly. During the day we accepted an offer to stay at the clean and quiet schoolhouse. There Paul and Virginia slept and both improved.

Teachers from Deering, old acquaintances of the Kotzebue teachers, arrived by dogsled for a visit. While they visited, we slept. They talked until midnight, then called us. Our pilot planned to fly at one o'clock in the morning, thinking there might be little fog at that hour. How I hated to leave that warm bed. They all accompanied us to the plane. Our weather report from Barrow stated it was cloudy. Earlier it had been snowing. We said goodbye and climbed into the plane. The pilot opened the throttle wide open, but the plane remained still. We alighted and tried to shove the plane's tail around while the motor pulled. The icy blast from the propeller showered us with a cloud of icy particles but the skis would not budge. We chopped the ice from under the skis and tried to polish the running surfaces. Eventually we took off.

The crisp zero air was stimulating. It was 1:30 a.m. and full daylight. The plane's wings sparkled with a coating of ice. The mountains in the distance resembled cameos. Fog lay on the ground. We followed the beach over the ocean ice, keeping just offshore. We saw fog lying everywhere over the mountains. It filled the canyons between and rolled over the sides, spilling into the ocean. The Baird and DeLong ranges showed above the fog. We flew just over them. Again the mechanic looked worried. Often, as on the first trip, he raised a paper bag to his lips and drank long. Suddenly he nodded and his face looked less tense. I inquired if he saw anything, and he nodded in the affirmative.

"I see a hole in the fog about 20 miles ahead," he replied. We continued on a while with a sea of fog to the east and a black cloud, indicating open water, to the west. Below were billowy clouds of fog with ragged peaks sticking up here and there. Finally we arrived over the opening in the fog. We looked down and saw only the open sea. The huge floes of ice formed a pattern below; everywhere else was fog and mountain peaks. Far ahead were the peaks of the DeLong Mountains indicating the village called Kivalina. Beyond this range we planned to follow the beach toward Barrow. Fog filled the Kivalina Valley. The other pilots and non-pilots at Kotzebue all had remarked that we should go right through this. I feared our pilot might try it. The sun came up, a ball of fire, showing the peaks like sawteeth upon the horizon. The plane turned from the open water to the mountains, then for the third time headed back toward Kotzebue. We all sighed with relief. However, the pilot made another brief attempt up the Noatak River route of our first attempt, before returning to Kotzebue.

Again the teachers greeted us and we spent the night at their home, sleeping late. We heard that the weather at Barrow was reported clearing. I went down to the roadhouse to see our pilot, who was discouraged to the point of frustration, and suggested that he arranged for a local flier to take us to Barrow. He had to return to Bethel soon, because Bethel's snow and ice were almost gone and his plane was equipped with skis. If he could not, he would need to have wheels flown to Kotzebue, an additional expense to him. He was willing to consider this. I reminded him that pilots Mirow and Wien were both due at Kotzebue.

On the way to the house I heard the faint hum of an airplane motor so retraced my steps toward the landing field. It was Noel Wien in a Ford Tri-motor, enroute to Fairbanks. I attempted to get our pilot to make a deal with Wien to take us to Barrow. When that failed I agreed to charter the Tri-motor and pay his $1,000 fee privately. Wein promised he would return for us as soon as he reached Fairbanks. Near midnight that night we heard the Tri-motor and we were told to be ready to start at one a.m. I hurried to get Virginia and Mary from their beds and we were back to the plane on time. There were black clouds to the north and another big one blowing in from Bering Strait, and it began to snow. We said goodbye once more. The ground ahead was visible for about five miles, but we were soon over the clouds. At intervals we had a view of the ground, but more often we just cleared the fog. Not even a mountaintop was to be seen above it. Soon to the east there arose a fog bank much higher than that over which we were flying. A dark blue line to the west we presumed to be the water cloud, and soon other clouds could be seen high in the west. The sun seemed to turn, but it was only our plane which was turning, and soon the sun shone through the windows on the opposite side of the plane. For an hour we continued. Finally, through a break in the clouds we saw a river below. We lost altitude and flew along the riverbank very close to the ground.

Suddenly we saw a graveyard on the riverbank, then a village that we recognized. Again we were thankful to be safely down. The sleeping village heard the plane and some of the more hardly souls were there to meet us. As we alighted the raw wind tore at our clothes and the snow pounded. Once more we were back in Kotzebue. We returned to the teachers' house.

It stormed all day long so we did little except visit and eat. Mr. Hurst and Mr. Beatty were enjoyable companions, as were the teachers and the visiting teachers, who we found were to be our neighbors at Wainwright (about 85 miles southwest of Barrow). Paul and Virginia were by now much improved, to my relief. During the morning news came of the Nenana's Ice Pool, Alaska's annual guessing contest: $95,000 was won, the winner also winning a lesser pool. His guess had been 4:13 and the ice had moved out at 4:11.

At 11:00 a.m. we took off once more, the three motors running smoothly. Our pilot, Noel Wien, was one of Alaska's most famous, and the first man to cross to Siberia. He was also noted for being careful. We were traveling at an altitude of approximately 10,000 feet and did not seem to cross over as many mountains as we had seen on other occasions. Far below we saw many small canyons and passes, and traced them on a map. We could see numerous blind canyons and, more than ever, were thankful that we had not found ourselves flying in one of them. Once over the DeLong Range we followed the Utukok and Kaolak rivers and by three in the afternoon were over Wainwright, where we landed to drop some passengers.

From Wainwright we followed the shoreline of the Arctic Ocean. Snow-covered tundra showed on our right; ice and a lead of open water were below. Like a thread, a dog trail appeared parallel to the shoreline. Several dogsleds were on the ice. These were the sleds of whaling crews, we were to learn, for it was the whaling season there. Below we saw an igloo, some houses—the village, 16 miles from Barrow, where the year before Wiley Post and Will Rogers had landed to inquire the way and on the takeoff crashed. Minutes later we were over Barrow, at last.

Lee Suvlu, janitor at the Barrow hospital.

Barrow

The village appeared below us as if spread upon a relief map. The ocean extended on and on, a sea of ice as far as the eye could see. Beyond Barrow a long sandspit pointed north to the Arctic like a slender finger. A lagoon divided the village into two parts. For miles along the beach a wall of ice, almost 100 feet high in places, spread to the very doors of some of the buildings, and had crushed many of the whaling boats. The drifting snow ran like streams of water below us, and covered all except the largest buildings. We could see little trails that united the two villages and led from house to house.

One part of the village was on the sandspit, arranged around a trading post, a large central building surrounded in orderly fashion by warehouses and living quarters. Long whaling boats on high racks stood at the shore. Near these were the smaller dwellings of the native village. This was Charles DeWitt Brower's trading post and village. The other village was larger and had more substantial buildings. Most pretentious was the schoolhouse, easily identified by its yellow-painted exterior and signal mast. The Presbyterian Church was painted white with two red steeples, and nearby were the missionaries' residence and its large warehouse. The radio building was back from the rest of the village on the bank of the lagoon. Its army-gray color and aerial poles identified it readily. Between the mission and the radio building, on the bank of the lagoon, was a large, new, unpainted building we knew must be the doctor's quarters.

As we circled it was apparent we were going to land on the lagoon between the villages, and as we peered out, all eyes for our new home, we saw little black dots converging on the ice. As the plane glided to a stop a crowd of people with smiling, happy faces rushed to meet us. These people were different from others we had seen. Their parkas were covered with cloth of many bright colors. Virginia, Paul, Mary and I stepped from the plane and were greeted warmly by men, women and children as they closed in on us. We could not have hoped for a warmer welcome. Mr. Brower greeted us, as did Mr. and Mrs. Morgan, the radio operators; Mr. and Mrs. Klerkoper, the missionaries; Miss Deaton and Miss Speenberg, nurses; the doctor and teacher who were to leave Barrow on our plane. There was a noticeable air of coolness among the whites and we recalled we were on an "emergency" mission. Soon we learned why.

There had been a quarrel that had ended in a fistfight between the doctor and teacher. The village was still divided and the participants in the fight were being discharged from the service and sent out. We could not help noticing that neither spoke to the other. They and their wives scrambled for the preferred seats in the plane. When the plane took off, one couple occupied the seats farthest forward and the other couple those farthest back.

We were shown to an attractive four-room apartment, all neatly furnished. Tired, but happy to be safely there, we inspected every inch of our new home, and thankfully sat in the deeply upholstered chairs of our livingroom. It was the thirteenth of May, we recalled. We decided that the thirteenth would never be unlucky for us again. We had been ten days trying to make this last lap of our journey and it had taken the thirteenth to get us here.

The sun was high in the sky. It shone all day long, circling the horizon. The continuous daylight confused us no end, so before retiring we drew the window shades to darken the room and slept as we had not slept since leaving Akiak 12 days before. Suddenly I jumped from bed, half awake, as a great roar filled the room. At first I thought the house was on fire, but dashed into the kitchen to find a startled Eskimo bending over the cook stove. He said that he was Lee Suvlu, janitor for the hospital, and was making a fire with gasoline! I explained the danger of using gasoline for kindling fires. Apparently I did not convince him for he continued to make them in the same manner.

The sun was now in the east, just as high above the horizon as when we retired, except that it then had been in the west. Thinking to have a cup of coffee to begin my day, I realized we had no food supplies. Our cupboard was really bare. The hospital had burned a short time before our arrival and with it the food. The other families in the village had received their annual supplies, and had added to these by buying heavily from those of the trader. We had no idea how very scarce food was at that time.

By now Virginia and Paul were awake and Paul wanted milk. I found a can of milk that only had to be diluted with water, ordinarily a simple procedure. Here, as in our home on the Kuskokwim, there were no faucets. However, Suvlu came in with a bucket of ice which he placed on the stove, now beginning to get warm. While we waited for the ice to melt I looked through the window and saw a huge pile of sacked coal, our winter's supply of fuel, and beside the doorstep a pile of ice cakes, our source of water. I had not speculated on our water supply before. Suvlu explained that the ice was hauled from a lake three miles farther up the sand spit.

"How do you haul it?" I inquired.

"With the hospital tractor. We go once or twice a week and bring a sled load." And he pointed to a huge wooden sled with a bed some 10 x 18 feet.

Eventually Paul's bottle was prepared and I drew my parka over my head. I compared my clothing with the Barrow dress. Suvlu's outer parka was of drill, but much shorter than mine, reaching only to his waist. It was large, roomy, and under the cloth there was a reindeer parka worn hair side in, for greater warmth. Many of the men had parkas which they wore with the fur out, most striking in appearance (all brown except for two white strips extending down over the chest and either side of the face, making one at a distance look very much like a walrus with large tusks). Their trousers were heavy wool or fur, the fur side being worn next the skin. Their boots were made in like manner except the fur was out; water boots were without fur. Everything was for warmth and comfort, was light in weight and practical.

The parkas worn by the women were quite long, reaching to the knees. They were roomy and each had a belt fastened tightly about the waist; babies were carried on their mothers' backs and were held in place by the belt, which served as a footrest for the child. I wondered why they did not smother but observed the mothers swinging their arms against their sides as if trying to fly. This pumped air for the baby to breathe. Every once in a while the mother would remove the child and I saw how well-mannered, or housebroken they were. A zipper area without zipper was part of each baby's trousers.

As I walked in the crisp air it occurred to me the Barrow men were different from Eskimos elsewhere. Almost all spoke excellent English. They were larger than others we had seen. Some of the children had curly hair. Whalers and sons of whalers they were, for Barrow had been the rendezvous of whaling ships for years and no doubt many sailors had taken native wives.

The radio station, manned by the Alaska Communication System, was a U.S. Army installation. It housed the operator, his wife and two children. This was our only means of communication with the outside, by way of Juneau, since here at Barrow we could expect but one supply ship a year, the only time we would receive all classes of mail as well as our food supply. There would be three mail deliveries during the year by dogsled, and this would be limited to 200 pounds for the village and points eastward, so would probably include only first-class mail. Magazines and packages had to wait.

The Presbyterian Church and its buildings interested us. After the trader's building this was the oldest in Barrow. Dr. Griest, a medical missionary, had brought religion and medicine to this farthest north coast. He had ministered to the natives' illnesses and looked to their spiritual welfare. He had likewise so succeeded in suppressing their old beliefs that only a few of the older people knew the native dances, and all the old native dance houses had been done away with. It was evident that Dr. Griest and his wife had done marvelous work. They had taught the natives much that had added to the villagers' comfort and bettered their living conditions. Because of infirmities due to age the Griests had been forced to give up the rugged life and had been replaced by a younger couple.

The landscape sloped upward gently from the village and at the top was the sprawling school. There the children were taught the three R's and we were to discover that as progress was made in education the old ways were forgotten. As on the Kuskokwim, the youngsters looked to a job with a typewriter, or to teaching, in preference to hunting the ice pack for their daily food. Behind the school building there was a real ship's mast, complete with crow's-nest and cable ladder swinging to the ground. Another wooden building nearby was called the "Native Store"; this was the government's way of competing with the white trader. The government called it a cooperative store. All the natives were given stock in it. All the financing was done by the government and it did not necessarily make money, only provided competition. It was supervised by the school system under the direction of the teacher of the native school and operated by a native, Bert Panigeo.

The native huts followed the beach and appeared as small hillocks of snow; only on closer inspection did one see they were dwellings on the otherwise flat, windswept, snowy plain. As I walked I appeared to be wading in a shallow stream, not of water, but of fine pellets of snow carried on the surface by the wind. Above the snow in one place was a clothesline held high by driftwood poles, swaying in the wind with the weight of a reindeer hide. There was a sled nearby and lying beside it was a line of dogs picketed on a long chain, each dog separated from the others as was the custom. There were from five to twenty dogs beside each house. Some were mangy-looking, small, white dogs, tough Siberians that could travel faster and longer on less food than any other breed; others were large, white Greenland dogs whose ancestors had been brought here by Steffansson; a third kind more resembled the wolf, the Kotzebue strain. All were vicious and I avoided them.

As I passed the reindeer skin blowing in the wind the dogs set up a great din and friendly people immediately appeared from inside the house. The house itself was covered on all sides with blocks of ice that leaned against the outer house wall. The window was covered by a clear piece of ice or seal gut. Conveniently near the door was a cache built on four poles and as high as a man's head. A floor of boards or poles supported carcasses of reindeer. Hoofs and horns protruded through the snowy covering. Nearby was an ice cellar. These ice cellars were holes many feet deep and wide, hollowed from the permanent ice. A tall ladder reached from the bottom to the entrance, and they reminded me of enormous underground jugs. The cellars were for meat storage and in them were more carcasses of reindeer, huge chunks of whale, walrus, ugruk, and seal. I learned that we had a cellar at the hospital that was, in fact, the largest in the village. It was many feet underground and in it could be stored a hundred reindeer carcasses.

I accepted the natives' invitation to enter the house, and stepped down until I was in the storm entrance. The door was carefully opened and closed behind us. Much gear was stacked there in the storm shed. Another door permitted us to enter the small, dark room, and it was a few minutes before I could see all of it. I returned the greetings of the others in the room. The furnishings were scant. On the left was a small, tin stove, which did not appear to have a fire in it. To the right was a dead seal, lying on its back with the head toward the door. Its belly had been slit and a dish caught the blood dripping from the seal's nose and mouth. Across the back of the room and halfway to the top was a shelf about four feet wide. Beneath, as well as on the shelf, were reindeer skins. In these the children played and in some there were adults sleeping. Those sleeping were entirely undressed, yet seemed to be warm to the extent that some were perspiring. An alarm clock was hanging on one wall, a hot water bottle on the opposite, and beside the stove was a well-worn box, the size of an apple box, which completed the room's furnishings.

After a short visit I took my leave and followed the beach to the end of the village where a deep ravine and a higher knoll gave me a better view of my surroundings. Trails led onto the ice and there, as on the river, was the garbage from the village. Dead dogs and refuse littered the ice, awaiting the breakup when the ice would drift away down toward Wainwright, and out to sea, the land again clean.

Arriving at home, Virginia and I held a consultation on the state of our larder. I told her what I had learned of the scarcity of food in the village. We decided I had best visit Mr. Brower, the trader.

"King of the Arctic," I had heard him called, and he *was* a king! For more than half a century he had reigned over a thousand snowy, icy miles. I swung open the door of the whaling station and entered. Mr. Brower was alone and rose to greet me. Huge, deep-chested, his head crowned by a thatch of snowy white hair, he appeared every inch a king, so distinguished in appearance and gracious in manner that he at once commanded respect. He appeared to be in his late seventies. He dropped his work, a string of beads from beautifully colored old ivory that he was making for his daughter, Maria. It was evident that she was the apple of his eye. I glanced about the large room. In the center was a pot-bellied stove, red-hot at its middle, making the room comfortable. One corner was fenced off and a sign proclaimed it the "Barrow Post Office." There was a desk and over this a picture of Will Rogers. A work bench stood along one wall and above it were nailed two souvenirs from Wiley Post's plane: one, the winged emblem with the name "Lockheed"; the other, the ship's numerals.

He insisted I accompany him to his home. He led the way along a snowy path, the walls of ice on either side higher than our heads. We stomped the snow from our boots in the stormshed, then entered his den. A large table almost filled it, and as I admired it there was no doubt he enjoyed my astonishment as he began removing the top and, with undisguised pride, converted it into a pool table. Even more interesting were the walls covered with bookcases crammed with books. There were many pictures arranged on the walls, some of notable personages; others were of sailing ships. I recognized the old cutter *Bear* and the *Baychimo*, the ghost ship of the

Arctic. I recalled that I had heard that this ship, when abandoned, contained a cargo of valuable furs that had become salvage, and that the trader, Morris, of Cape Halkett, had successfully recovered it. The frames of the pictures were interesting. Mr. Brower had made them from bits of wood, copper, aluminum and other metals from wrecked vessels. How surprising it was to find at the end of the world this interesting and comfortable library of the North.

We were hardly out of our furs when a sweet voice called and I was ushered into a combined living, kitchen and dining room. Mr. Brower presented Maria, his beautiful daughter, now just barely grown up, and Mrs. Brower, who was a native woman. We sat down at the dining table and were served a lunch of pickled pigs' feet, steaming coffee, and other good things. It seemed there was no end of surprises in this isolated community.

Mr. Brower revealed bits of his long and memorable stay in Barrow. In his youth he had at one time been a circus barker, but thought himself not suited to such employment. His early love was for the sea and chance led him to a berth on a whaling ship and to Barrow. The achievement that he seemed proudest of was that he had successfully prohibited all intoxicating liquors among these people; he had personally destroyed all stills constructed by both whites and natives.

He related the story which was the highlight of Barrow's history and publicity, the Rogers-Post tragedy. One morning Claire, a Barrow native who had been camped to the southwest, 16 miles down the coast, came to the village. He had run all the way and, almost exhausted, fell into Bert Panigeo's store, gasping out that an airplane had crashed and the two passengers in it had been killed. They summoned the schoolteacher who, with several natives, hurriedly launched a couple of whaleboats and went to the scene of the tragedy.

Post's plane had circled an igloo, then landed on a nearby lagoon. The fliers inquired the way to Barrow, and after receiving instructions took off again. When about 150 feet off the ground, the plane suddenly had plummeted to earth. It lay nose down in a small tundra lake. The natives had succeeded in getting the body of Rogers out of the wreckage, but to free Post's body David, Mr. Brower's son, had to crawl into the plane and release the steering gear, freeing the body, which he succeeded in carrying out to the others. The dead men were placed in an umiak and carefully towed to Barrow. The Eskimos knew only that two great Americans had lost their lives, but all were very sad. Shortly after, a plane piloted by Joe Crosson arrived and flew the bodies back to Fairbanks and on to the States.

This led to another story, the Barrow quarrel, and explained for the first time the background of our reassignment. Mr. Brower related that publicity added to the income of Barrow residents, and that there were two news services, handled by two of the four or five whites of the village, and there was keen competition for news. The radio station was the news outlet. The teacher seemed to think he was discriminated against in sending out news and soon the whole village joined eagerly in the quarrel; at least they all took sides. The teacher and natives were on one side, the rest of the village on the other (Mr. Brower had attempted to remain neutral). When the teacher and the doctor resorted to a fistfight, they were discharged and, despite much pressure, were ordered to leave.

This explained the unmistakable coolness of the whites to us. I could see that we were in a very ticklish position. Perhaps Mr. Brower was letting me in on a little secret. I suspected he was, and I resolved to be as diplomatic as possible.

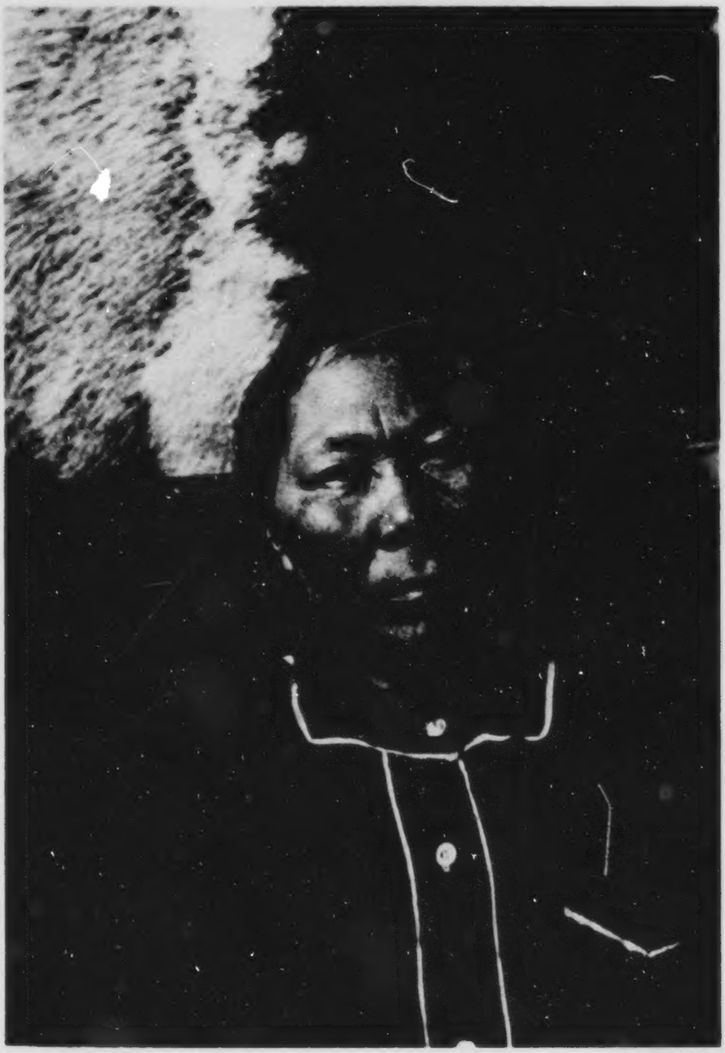
Our lunch finished, we returned to the store. Mr. Brower apologized for his lack of help in the store, explaining that his native clerk was at home with his wife who was sick, and went on to say, "My brother-in-law was drowned last year. He was like one of my own sons."

"Drowned?" I asked, "Here?"

"Yes. Mrs. Brower loves to hunt. That day a white whale had been playing out in the ocean nearby; fishing, I guess. First I knew, Maria came running and said that the boat had capsized and the old woman was in the water. I suppose the boat had capsized when Fred threw the spear. Anyway, Mrs. Brower held to the inflated seal poke float, this boy held to the boat, and Fred attempted to swim for shore. He took a few strokes and disappeared. We never found the body though we hunted for a long time. The doctor worked over Mrs. Brower six or eight hours before we were sure she would live. The boy was not so bad. I put him to bed here. Later I gave him Fred's job. Fred was awfully handy, knew everything; he was just like my own boy."

Two things were clear to me. Mr. Brower had reason to regret that the doctor was being replaced. Secondly, he saw no difference in the peoples of Barrow; they were all as one to him.

I explained our need for food and found we could have only coffee and sugar. His stores had been badly depleted since the hospital fire. I was shocked at the prices, for sugar was $35 a hundred and coffee $1.00 a pound, but, expensive or not, we were glad to get what we could.



Eskimo woman with tattoo on her chin.

Life at Barrow

So began our stay at the top of the world. I was now in charge of the medical work for a thousand miles, from the Canadian border to Point Hope. Perhaps this should have made the world look larger to us. In reality, it did the opposite. Our immediate world was made up of 11 whites (two or three white families including ours and hospital personnel) and 300 Eskimos in Barrow. There were eight whites eastward toward Canada, and six between Barrow and Point Hope. There was a total native population of about 1,700. Daily our horizon grew smaller as the world outside and the twentieth century became more and more a dream. We settled down to life in an ageless world, as it had been lived for countless years past.

We began housekeeping at Barrow in quarters so comfortable we soon forgot our days at Akiak, though we soon found things to worry us, especially the shortage of food. But we found sugar and coffee and several tins of milk for Paul, and the natives brought us many geese and reindeer for our ice cellar, and we knew we would not starve.

The natives were very friendly and the more we saw them the more at home we felt. Barrow native faces were brown but beneath their clothing their skin was white, almost as fair as ours. They differed from the people on the Kuskokwim in many ways, their dialect for one. The change in dialect occurred between Mountain Village and Unalakleet. Still another dialect was spoken by the natives farther east, although when Barrow natives traveled eastward they understood that speech and after a short association spoke it almost as well as their own.

Barrow was not at all as we had pictured it. We thought it beautiful. True, the skies were gray and the ground was buried with snow, but everywhere there was an air of cheerfulness. It was spring. The sun was in the sky when it should have been night. Then it was on the northern horizon traveling east, painting the heaped snow and ice ridges a deep purple. At night hoarfrost formed fairy trees on the ice, then was carried by the wind in endless running streams of white to pile drifts on the land. By early morning the sun crossed to the east and the village began to stir. Dogs clamored for their food, trails of blue smoke came from the chimneys, and natives appeared everywhere. Team after team of dogs went onto the tundra for ice, fuel or meat, and the little black dots on the ice were men and women squatting before breathing holes where the seals would appear.

Daily I would walk through the village seeing the sick. The village paralleled the ocean beach. The homes were small but clean and neat. One I visited had a tiny loft, scarcely three feet high. There an old man named King Aktuk sat weaving a whalebone basket. It was black, trimmed with white, almost four inches in diameter and two inches high. It had a lid woven of whalebone and was crowned with an ivory carving of King Aktuk himself at the top. It was expertly done. He sent all his baskets "outside" for sale and received $25 for each of them. He had taught the school children to make them, but their baskets were neither as beautiful nor did they sell so readily.

Beyond the village there were many earthen mounds. The children who followed at my heels when I wandered there told me these were the sites of former homes. In summer the villagers dug in them for ivory and spear points, with which they bartered with visitors desiring souvenirs. Scientists had told them four distinct civilizations were represented in the mounds.

Many boats, large and small, were on the beach. Those of wood, some 30 to 40 feet in length, were whaling boats built in Seattle, but there were also many graceful umiaks, 20 to 30 feet long, and kayaks scarcely 7 feet overall. Many of the larger boats had been crushed when the winter's ice wall was formed.

It was an interesting land; we felt that we might never want to leave it. By June the midday air began to feel warm. Water dripped from the eaves and here and there bare tundra appeared. Smoke and soot settled on the snow about the dwellings and there the melting was fastest.

It struck us as strange that only four to six inches of snow covered the tundra. I sought the reason. During the winter cold there was, as mentioned earlier, little or no snow, and that that covered the land came in from the sea. Here and there, over the ice, there were clouds. These always meant open water. The constant movement over the vast ice fields caused pressure ridges to be thrown up, and great cracks or fissures where there was open water. The water, warmer than the atmosphere, gave off vapor just as if it were a great kettle steaming. This vapor rose in the air as a water cloud, freezing almost immediately in the sub-zero temperature and forming hoarfrost. The wind swept this cloud inward toward the land, piling it into drifts that packed like sand so that a cleated tractor scarcely made a mark on it. As one approached the open water, the vapor resembled a great fountain spraying many feet into the air, an awe-inspiring sight in its bleak loneliness.

With the advent of mild weather it began to snow, and we saw big flakes fall most every day. By early July the wind, which had blown from the northwest steadily all the time since our arrival, stopped; the snow became soft and the weather very mild. The sun, though seldom seen, was shining behind the clouds and there was no cooling at sunset.

It was time to get our summer clothing. The natives came and measured our feet for spring boots and water boots, which they soon brought ready-made for us. The spring boots had fur inside, but those for water were without fur. Inside the boots, for an innersole to keep our feet warm and away from the ground, were layers of whalebone shavings instead of the grass used on the Kuskokwim, to which we had become accustomed. The grass made a good innersole but did not wear long. Whalebone shavings did not wear out and retained their resilience.

Barrow natives had no money (they had never seen or used it) and only barter was known. We gave them a scribbled note on a slip of paper and they gave it to the trader in lieu of money, then once or twice a year we settled our account with the trader, redeeming the slips of paper given him by the natives. This had been provided for by the Department of Interior, which deposited our salary check in a Seattle bank. We had given that bank power of attorney, and it in turn paid our bills.

On June 22 the sun remained above the horizon the entire 24 hours. We had been in Barrow only a little over a month, but had seen two seasons, spring and summer. When we arrived, the snow drifts were piled high, the ocean and the beach covered with ice. The sun had been above the horizon all this time although the first 30 days it was seldom visible through the dense fog.

This second month saw the snow soften. We waded through soft slush over slippery ice so that walking was hazardous. Soot from the tin stovepipes of the igloos blackened the snow and the sun's rays no longer reflected from its surface. The ground began to appear here and there, and spongy tundra moss and grass began to show. The brown grass turned green, and small white, purple and yellow flowers began to peep up between the grass blades. The shore ice was piled high, brown and dirty, with many dead dogs, tin cans and other winter rubbish from the village.

The village itself changed. The houses were dug free of the surrounding walls of ice, the ground was raked and was surprisingly clean. White tents appeared on the sandbars; it was camping season and every family had one or two tents, as had been the custom since ancient times. Boats were caulked and painted in anticipation of the south wind that would bring walruses. By mid-July the tundra was bare.

The natives had a saying: "There is no summer in Barrow; only six weeks of hard sledding," which was true. The sleds were used on the wet grasses and moss, but both grew on the ice and the thaw never carried beyond their roots. One day I stood on one of the hummocks of grass conversing with some natives. Suddenly the mosses and lichens separated from the ice and I sprawled on the ground, much embarrassed. The natives politely refrained from showing amusement. I perched on another grassy spot only to repeat the performance. I laughed at my awkwardness, attempting to hide my embarrassment, and the natives smiled politely.

The weather was always changeable at Barrow. A day might begin as beautiful and balmy as one could wish, the sky cloudless, the sun shining brightly, dazzling our eyes when the window blinds were opened. By afternoon a wisp of fog would appear in the northern sky; a few minutes later all would be gray and chill, with a penetrating wind driving the fog and making every living thing cold and uncomfortable.

The constant sunshine was sometimes disconcerting. Our house was built primarily to withstand cold weather. Its windows had three thicknesses of glass and were sealed and could not be opened. Our only ventilation was from a little four-inch-square opening near the ceiling at one corner of the room; there was little or no circulation of air. When the sun shone brightly on the windows the rooms became uncomfortably warm.

On July 27, 1937, the day broke bright and sunny. The wind was strong from the northwest. A native came running to tell us the ice was breaking up. From our window we saw a crack in the ice between the shore and the pressure ridge. Soon there were many cracks; then there were only cakes of floating ice churning in the water as far as we could see up and down the coast. Like a river, the current began to move toward the point, carrying the floating ice with it. By noon the ocean was open to the pressure ridge. Only the ridge, like a coral island, was to be seen over the piles of shore ice. Beyond, for a time, the ocean remained covered by a sheet of ice, but soon the ocean swells would break that and only the pressure ridge would remain.

"Hurrah," we shouted, "we are sourdoughs!" We had seen the ice come and go. We were no longer cheechackers. We had to celebrate.

Several boats were on their way to Barrow. Captain Castell should arrive first, as he had the mail contract that year and had left Nome July 12th. Also, the S.S. *Patterson* had been chartered by the government to bring supplies to all traders north of Kotzebue. One day a boat approached from the west. Was it our long-awaited mail boat? Flags were run up at the radio station, school, and mission. The boat came near enough for us to make out her two masts and superstructure, but she showed no flag. Since it did not stop, it was evidently either the Hudson's Bay Trading Company's boat, *Fort Rok*, or a Canadian police boat. What a disappointment!

The next morning, August 1st, I looked from the kitchen window with sleepy eyes to see something strange among the cakes of ice—a mast, from which flew the stars and stripes. A moment later the little blue-gray hull of the mail boat, *Nanuk*, was revealed against the blue of water and white of ice. It seemed a long time before anyone stirred on board the ship, but finally two men appeared on deck and several sacks of mail were thrown into a dory and rowed ashore. The natives scampered to unload the mail from the boat. Each grabbed a bag and carried it to Mr. Brower's store, then five or six natives launched a skin boat and went out to the ship. Twice they brought sacks of mail and the third time there were three passengers, Captain Castell and a couple of natives.

Captain Castell, a weathered man, was perhaps 45 and a very congenial and intelligent fellow. He accompanied me home and we all sat down to a breakfast, which Mary prepared, and while we ate we listened to the captain tell of his life. He related how he had come to the area in 1900. Stefansson had given him work in 1906 and again in 1913, when he served as navigator. He talked of some of the incidents relating to their expeditions. It was clear from his account that he and the natives looked on Steffansson as a superman, as good as or better than the natives in their own element.

"All winter long," he related, "our cheeks were brown, numb and peeling from frostbite. We lived by the rifle, killing seal, bear, fox, dog or smaller animals and eating the meat raw and frozen."

Castell had lived by trading along the Alaskan coast as well as that of Siberia. He was arrested while trading in Siberia and imprisoned for a year; his furs and ship were confiscated by the Russians and in 1925 he was sentenced to death. Miraculously, he managed to escape only a short time before the execution date. Many of his experiences were amusing; others were not.

We were interrupted by the arrival of a small plane on the sand spit between our house and Brower's village and we looked to see who had arrived. It was Bishop Rowe, head of the Episcopal Church for Alaska. Although he was 81 he appeared hale and hearty. He was on a tour of inspection for his church. We thought him a remarkable man.

Captain Castell decided he could spare us some food from his stores and we purchased all the potatoes, eggs, oranges, apples and lemons possible. This was the first fresh food that Virginia and I had had for months.

The Captain did not tarry long; he was anxious to be on his way back to Nome, so from his boat I went to Mr. Brower's trading post. The mail had been dumped on the floor and sorted. I was given a full mail sack, all ours. We were hours reading the letters. All our friends seemed anxious for our return; yet there was such a feeling of uneasiness about conditions in the States expressed by all of them that we felt we were better off just as we were. Our parcels contained materials to work with during the long winter months ahead: dress goods, yarns and thread for Virginia; drawing material for me. I had a letter from my old friend, Willie Kesuylie, the Akiak native who made my parka, which pleased me very much. He had staked two gold claims for me along with his and he sent filing notices. It made us happy to think the natives considered us friends. It was two in the morning when we finished looking through our packages and thought to retire. The natives were still trading with Captain Castell, and he did not get away for two days.

This time of the year the natives were very busy. There was much to be done during the short summer to prepare for the coming winter, and each afternoon saw the sun dip nearer and nearer the horizon. The natives went inland and fished in the rivers for grayling, which they preserved by drying or freezing. The women searched the beach for driftwood; each piled what she found on the sand. It was the unwritten law no one would take it. Many natives went 80 miles eastward to the pitch lakes. There, pools of oil fed by springs seeped into the tundra, forming a waxy, thick, black pitch that the natives cut into squares and transported to Barrow for fuel. It burned with great vigor, giving a long-lasting, hot fire. Sometimes the gasoline content was so high it exploded when thrown onto the fire and many natives received burns as a result.

Our preparation consisted of planning the unloading and storing of supplies. The next ship would bring new teachers for the school so we no longer could use the school building for a dispensary and we had to find another.

Hearing that the ship also held 90 or more tons of supplies to be unloaded and stored, the natives and I decided we needed a new and larger sled or wagon. The natives began building one. For wheels, old oil barrels were used; for axles four-inch hollow iron pipe. The wagon bed was 12 feet wide and 16 long. Several attempts were made before we had a wagon that was entirely satisfactory. The first ones were constructed by fastening the hollow pipe axle through the center of the oil drums with boards, then filling the barrels with cement. After a few days for drying, we would load the truck with natives for a test load and attach it to our tractor and drive about the rolling tundra. One wagon after another failed, for the cement would break and the wheels collapsed. Each time something was learned and the natives refused to become discouraged. Alfred Hopson, their leader, seemed to live only for the success of his wagon and, after three or four failures, began building another with minute care and patience. It took days to build and many more days for drying the cement. Finally, the day came when Alfred said we would try it out. We again loaded the platform with natives (the equivalent of five tons) and began driving about the village, over tundra and through water, and the wagon rolled right along. Alfred's wagon was a complete success.

One day the tractor ran into the lagoon. Lee Suvlu, the regular driver, was on vacation and another native was driving. It was almost completely submerged and lay half on its side. I pretended not to have seen it. The natives rigged a block and tackle to the tractor and fixed the other end to a "dead man"—that is, a timber buried deep in the ice—similar to their ice floe technique for pulling whales from the water. Soon most of the men in the village were pulling at the free end of the rope, singing an old sea chanty as they did when they pulled the whale meat onto the ice. Everything was without haste and methodical, and inch by inch the tractor crawled ashore, all three and a half tons of it. It was apparently none the worse for the experience, for after letting it stand for a time they started it and it ran as usual.

Summer days were beautiful. The sky was blue and the ocean an even darker hue. Now and then pink and gray painted the sky where sunshine struck the fog. Toward evening the sky and water became a soft gray, resembling, more than anything, a vast sheet of aluminum. Whites and natives alike stood in the village for hours watching the beautifully colored sky, which was magnificent beyond description. During middays the temperature averaged around 45 degrees; while 62 degrees once had been recorded, 52 was our highest. That day the natives appeared quite uncomfortable. They removed their parkas and snow shirts but kept them nearby; well they did, for soon a line of fog appeared over the ocean and within minutes the air was chill and all had again donned their heavy fur clothing.

It was a day like this when word came that a plane was enroute to Barrow from Kotzebue. It was late afternoon when we heard the motor. The fog had closed in and the craft could not be seen, so the radio operator directed the pilot: "You are east—north—now you are south of us." Finally we saw the plane about 100 feet in the air as it crossed the lagoon between the villages. There were only a few hundred feet for the pilot to make his turn and come back over the narrow sandspit, and he had to avoid the aerials of the radio station. Because his pass through the village blew fog to the ground, he would have to land on the next attempt or he could not possibly see the ground. However, he made a perfect landing, much to the relief of everyone.

One day I received the fright of my life. I glanced through an upstairs window and saw Paul and Alfred's boy, Sammy, walking along the sandy beach, lately freed of snow. They were in their parkas and at the distance appeared to be little balls of fur. A short distance beyond them a native had left his sled dogs alone; to prevent them from leaving he had turned the sled upsidedown. Feeling concern for the children

I hurried downstairs, snatching a rifle as I ran. Rounding the corner of the house I saw the dog team start for the boys. The sled was no deterrent to the nine dogs. Sammy was pushing Paul before him as fast as possible away from the dogs and toward the water of the lagoon, but it was evident the dogs would have the children before I could get there. But I dared not risk a shot. I took the most direct route, which was over a snowdrift rather than around it. The water had tunneled under the snow and my foot went through the crust and I fell sprawling. I gave a terrified yell as I went down. I was afraid to look up. The time I lost in the fall was all-important and I knew I was too late to save the children.

To my surprise, I saw the dogs all in a pile fighting and the boys still running. The team had come upon one of our pups, which had followed the boys. In my haste I had failed to see him. No doubt his presence saved the lives of the children. My shout had attracted the attention of the natives in the nearby tents on the beach and one of them was running for the dogs. Likewise, I lost no time getting to them. I had a nasty cut on my hand from my fall, but I scarcely noticed this, for I was so happy Paul and Sammy were safe. Sammy was a real hero; he never once thought to save himself, but kept Paul ahead of him as he ran.

Virginia and I had had spring fever and had planted a garden in a carefully prepared hot bed or cold frame, using soil scraped up from here and there. It was more like peat moss than dirt, but we planted lettuce and radishes. When the plants appeared, we nursed them along with great care. They only grew an inch or two in height, and would grow no more. One morning it was raining ever so gently. Ducks and loons coasted about the floating offshore bergs. Then came the wind and the low rumbling of surf as it broke on the sand or bombarded the ice. The sky turned gray and the air was filled with snow. The natives said the ice pack was drawing near the shore. By now the beach was being pounded by the surf and spume rose high in the air as the whitecaps raced across the water and crashed on the ice ridge and beach. The natives marched to the beach in close formation, and, as we watched, began taking the boats from the water. Thirty or forty natives would lift each boat and carry it high up on the land. That night the storm broke with great fury and the sea returned Fred Solomon's body, he who had drowned while hunting seal with Mrs. Brower. The aged mother and father had patrolled the beach through each storm since his death. The recovery of his body was a great relief to his relatives and friends, for the spirit, which had wandered over the sea in search of its body, now had a home and could rest.

We were concerned because our supply ship, the *North Star,* had not arrived; unless it came with our year's supplies we could not live through the winter. The ice was reported to be massed solid from Point Barrow to Icy Cape and for an unknown distance north. The Coast Guard cutter *Northland* came only to the Seahorse Islands, midway between Wainwright and Barrow, and then returned to Icy Cape. The sailing ship *Holmes* had also retreated back to Wainwright. The *Holmes* made another attempt to reach Barrow but was becalmed a few miles down the coast. Mr. Smith, a trader from eastward, with a fleet of whaling boats and many natives from Barrow, went to the ship's rescue and towed it to Barrow.

It took but one day for the *Holmes* to discharge her cargo. Most of it was for the traders, although there were several tons for the Mission and a few for the radio operator. *Our* supplies were on the *North Star.*

The Morrises, white traders from Cape Halkett to the east, arrived in Barrow with their two girls, aged six and eight respectively. The children spoke very little English but spoke the Eskimo language fluently. Since the mother and father spoke only English an interpreter was needed to speak with their own children. The children said, "Eskimo easy; English hard." Mrs. Morris said, "I do not know whether or not my children are dumb." Mr. Morris was away from their trading post much of the time, hunting or trading, while Mrs. Morris remained in the village, and the children played with small Eskimo children and came home only at night.

By September 10 the *North Star* only had reached Kotzebue, several hundred miles to the south. The ice was already traveling south, driven by wind and current, and every night new ice froze on the ocean. The sky and ocean were leaden and the nights now so dark that we needed lights to see. It was pleasing to see lamps lighted in the houses of the village once more, but the darkness seemed ominous to us.

We were thrilled by a message from Captain Witham of the *North Star* stating he expected to arrive about 6:00 a.m. and wanted to begin discharging cargo immediately. How glad we were. Another message came from Captain Witham saying the ship had left Wainwright, traveling in dense fog, and asked that we place lights to guide the ship, as he hoped to arrive before daylight. I set an alarm clock for 5:30 a.m., but that was not necessary as I lay awake most of the time and was on the beach before 6:00 a.m.

Daylight came with Barrow shut in by dense fog. The guide lights still burned from the mastheads. A gentle breeze began from the east and a small surf ran on the beach. Suddenly there was a shout from the natives: "The *North Star!*" Though I had always prided myself on my excellent eyesight, I still could see nothing. Then a whistle boomed through the fog and I caught my first sight of the ship.

The native boats raced to the ship's side and soon we were on deck. Whaleboats and lighters were alongside and winches began whining as holds and the deck delivered up the ship's cargo. The beach was all activity, too, as 500 tons of stores were dumped on it. All day long a constant stream of boats plied between shore and ship. Other crews took supplies from the beach to the village and stored them. Only dusk, which came at 7:00 p.m., stopped the activity. Several passengers had come ashore: three teachers for the native school; a Dr. Levine, who planned to do research; Miss Kerr, a nurse to help with the medical work; Mr. Berlin and Mr. Nelson, to survey the site for a planned hospital.

We retired at midnight. An hour later Virginia called me; she was ill again. This time it was different, and at five minutes past 3 a.m. a baby sister arrived for Paul. At the farthest point north in the U.S.A. a white child was born on September 13. Miss Kerr, our new nurse, and I officiated. We named the baby Virginia Lee.

At 4 o'clock I was alerted as the *North Star's* whistle blasted repeatedly so I went down to the beach. The surf seemed less angry but the waves had strewn the beach with ice pans, the mission boat and the 40-foot Navy hull belonging to Morris, the trader. The natives launched a boat and we went aboard the *North Star*. Captain Witham said he wanted to pull anchor and leave. I explained our food shortage, reminding him that, while he discharged cargo for two days, he had not put any of our goods ashore. I told him we had to have food to live through the winter. To this the captain replied he would try to get our groceries off but that he might still leave at any time, as he was afraid of the ice and wanted to get to Wainwright, or at least past the Seahorse Shoals, 40 miles down the coast. He would return later, if possible, or otherwise would unload there. Once he left Barrow, I knew that he would not return again that year. If our food were unloaded at Wainwright it would have to be brought up the coast by dog sleds—100 miles or more and some of the trail was very rough. Besides, it could not be hauled until the ocean froze over. Our canned goods would freeze and the cost of transportation would be prohibitive.

I told the captain my family must go with his ship if the food was not to be unloaded. The ship's whistle continued to blow, calling everyone ashore to return to the ship. The storm by then had abated somewhat and whaleboats and lighters again approached the ship. There was great haste, all the natives worked with a will and everything we had came ashore. By midafternoon all visitors had left the *North Star*. As we watched her move away, down the coast, Seattle-bound, we felt that the long Arctic winter was very near. But we had more to be thankful for than any of the others, now that Virginia and the baby were safe.

The schooner *Holmes* anchored in the ice off Barrow.

Arctic Eskimos

As mentioned earlier, in the early days whaling fleets had frequented the Arctic coast. The whalers were a law unto themselves. They sometimes carried off native women. If a government cutter was sent for them, they merely sailed northward and eastward beyond the "Point" and the government ships would not follow. In Barrow I heard how the wife and daughter of one of the natives went with a whaling ship for the summer. At the end of the whaling season the women were returned as agreed, but the husband did not receive the amount of rental he expected and it was said he appealed to the missionary for help in collecting the amount due. I had heard and read that Eskimo men commonly shared their wives with visiting guests and friends, but the custom did not prevail to my knowledge.

In the beginning we were confused by Eskimo kinships and had almost given up trying to understand them when by accident I came on the explanation. One of the native women told us she knew a woman living "outside," meaning in the States. She asked her father if she might write the woman a letter. "Yes," replied the father. "I was with that woman's mother before she married that white man; she is your half-sister."

And the woman replied, "I am happy to know she is my sister." The native woman, seeing my perplexed expression, explained: "Long ago, when most men stayed out at their trap lines during the winter, one or two men remained in the village. My father often stayed in the village. He said: 'While other men are good trappers of furs, I am good trapper of women.' That is why I have so many relatives and that makes us happy."

Children of white-Eskimo parentage sometimes resented their mixed blood. Some felt that they belonged to neither race, but this resentment seemed less pronounced at Barrow than elsewhere. Sons born to mixed races resembled the mother, and daughters were fair and most resembled their father, it appeared.

If we found the natives' way somewhat different from ours, we usually found that necessity had directed it. Their life was a hard one at best. The Eskimos were a proud and honest people. I never knew one to purposely tell a falsehood. They would go far out of their way to help anyone in distress, not occasionally but at every opportunity. The whole village would turn out when the ice pack appeared suddenly and moved in upon the beach, threatening to destroy the boats, or when a storm approached. I saw them drag the boats to shore, lift them to their shoulders and carry them far up on the land to safety. In like manner they would cooperate when a whale was killed by a whaling crew, the whole village working as a unit until the meat was safely ashore and into the ice storehouses.

"It is a rule of the village," Alfred explained, and told of an incident by way of illustration. Once, Jack Smith, a white trader, had his boat caught fast in the ice about a quarter mile off the village. Thinking he might be in trouble, Alfred went out to see and, stepping from ice pan to ice pan, managed to reach Mr. Smith, who looked very worried and said so. It appeared Smith was in immediate danger of losing his boat.

"Think you need a little help?" Alfred asked. Smith only wished something could be done to help, but he could think of no way. Alfred stepped out a few feet from the boat, placed a small stick upright in a crevice in the ice and on this he placed an old sack. In a few minutes men were coming from everywhere and the whaleboat was lifted onto the ice and carried to the beach.

And so the natives lived, not alone to help one another, but in honesty with everyone. Often we saw natives in kayaks recovering bits of wood floating on the ocean. The wood they recovered was placed on the beach; one stick crossed over the other, or some other identifying sign. Thus it might lie for a year unmolested by other natives. There were other laws always strictly observed by all the natives. That of tying dogs up when they reached the age of six months was rigidly enforced. A loose dog was promptly shot.

Natives always had a name for everyone in the village. Few white people ever knew what they were. The naming occurred only when the whole village met and selected one that it considered appropriate. It was several weeks after Virginia Lee's birth before she received a name; they waited until all the hunters had returned. Only through a close friendship with one of the natives did we learn the native name—*Koyana,* which is the native word for "thank you." We learned that all the village had feared for my wife's life. They expected her to die because she became so large and was ill so much of the time. Virginia and I thought the name very appropriate. They gave Paul the name *Puchuk,* which means "into everything."

Like children everywhere, Barrow children were fond of play. Boys hunted birds with bow and arrow in summer and at early age were pressed into service helping their elders. They were taught hunting, fishing and the art of sled-making, as well as the other essentials. Girls played at "teeter" constantly. Wherever a board could be balanced over something they enjoyed bouncing each other. They became expert at this, and it was a common sight to see these little girls (carrying their baby brothers or sisters on their backs within their parkas) on the teeter-totter boards, bouncing each other high into the air. The girls also were introduced to work at an early age and were taught the preparation of skins for clothing, as well as the art of sewing, even fishing and hunting; it was not unusual to see young unmarried girls hunting on the ice along with the menfolk.

Indians were their traditional enemies. Here, as on the Kuskokwim, the Eskimos lived along the coast, the Indians in the interior. There were many stories of encounters with the Indians, whom the Eskimos exercised great care to avoid while hunting caribou or sheep on their trips inland.

One day shortly after the arrival of the new schoolteacher the natives flew an old sack from the signal mast behind the schoolhouse. The teacher inquired why the old "rag" was there, and I told him it was a signal to the villagers that a dance was to be held that night. He objected to the practice and, except when he was gone, we never saw the signal there again. Instead, while walking through the village we would see an old sack suspended on a pole over a native house.

I was awakened one night by a knock on the door and a small girl announced, "There is a dance." Hurriedly I drew on my clothing and followed. There were eight drums and the old people who still remembered were teaching the children to dance. How they loved their music and the dances! The old people rejoiced that the government was willing for them to revive the old customs. The drummers sat on the floor along one wall of the room and the dancers took the center of the floor. The chant began, the drums boomed rhythmically and the dance started—combination muscle and stomp. Sometimes I felt my own muscles keeping time with the throbbing drums and dancing natives. Jerry, an old man from somewhere down the coast near Icy Cape, which the mission people did not yet supervise closely, outdid all the others. His dance was grotesque but comical, which pleased everyone.

The dance continued long past midnight; at last I left them and I never knew how late they danced.

Once, during the absence of the teachers, the gunnysack flew from the signal mast in the afternoon. This dance was for visitors from eastward. It seemed far more formal than any of the others I had attended. All the older persons sat together in a place of honor, directly behind the drummers. The singing was more enthusiastic and the dancing better, as there was dancing competition between the visitors and the home people. It made us feel good to see how happy the people were, especially the older ones.

One of the younger men remarked: "Seventeen years ago the Mission forbade us to dance. Then everyone wanted to dance all the time. Now the government permits us to dance and no one wants to." For 17 years the old folk had put the dance aside and the younger men had never learned. When the ban was lifted the very young children danced at every opportunity, as did the older ones, but the young men and women were more hesitant.

There were other customs less pleasing to us. It had long been the practice to help the old folk into the land of spirits by placing them in an ice house without food or water and sealing the door shut. The old folk just waited until the end came.

Farther east it was still the practice to toss girl babies to the dogs. Sometimes their mouths were filled with snow or moss in order to still their cries. It was a chore usually performed by the midwife. There followed a fight among the dogs. This always took place following the birth of twins, as they were considered bad luck. If one twin happened to be a boy he was kept, but the girl was always disposed of, as were many of the girls of single births. Women held a place definitely inferior to that of men.

Barrow Medicine

Soon after our arrival at Barrow when we were scarcely settled in our new home, I heard Virginia calling, "Come quick! Here is a white man." I was in the attic storing supplies and hurried down. There, sitting in the middle of our livingroom was the strangest white man I had ever seen. A shock of unruly brick-red hair topped a wolf-ruffed, voluminous fur parka. Recovering from my astonishment, I walked forward with hand extended, "George is my name," I said.

"Chamberlain is mine," he replied. "You are the new doctor? I have come to have my appendix out."

We were in no way prepared for surgery. We had a few surgical instruments, but not so much as a table. However, this man had suffered an attack of appendicitis at his lonely post, and had come 270 miles for treatment. I could find no evidence of a diseased appendix, but this only meant it was in the quiescent stage. There seemed to be but one thing to do, so the following afternoon we did our first major surgical operation in Barrow.

We placed a bed in the nurse's quarters, as yet unoccupied. Virginia baked sheets and towels in the oven of the kitchen stove after ironing them. We boiled all the instruments in a kettle. We then placed the patient in the double bed, which we used as a surgery table. Miss Speenberg, our village nurse, poured ether and kept the patient asleep while Virginia and I removed the offending appendix. The double bed across which we worked made it necessary for me to be on my knees, while short little Virginia, pregnant as she was, could scarcely reach across to assist. She was practically lying on her face, but the operation was completed. The patient had been correct in his diagnosis, and his recovery was rapid and uneventful.

Miss Keaton, our traveling nurse, had worked in Alaska 18 years. She was a fine specimen of womanhood, tall and rugged, and was given the name "Big Girl" by the natives. She was 38, but her hair was snowy white, her blood pressure beyond discussion. Alaska and the rugged life had left its mark on her. When on the trail, she smoked a pipe to keep her nose warm and was not averse to eating the native foods. She had experiences few white women can equal. Her diary, which she had kept for 17 years, burned with the Barrow Hospital, and was a great loss.

Miss Keaton amused us with her tales about the North. Every year, she laughed, frantic dispatches would be poured out of Barrow: an epidemic of some kind—flu, diphtheria, typhoid, meningitis—anything that made news. Generally it brought a plane with medical supplies, and, incidentally, fresh food and mail, which was what was intended it should do. One year it was an epidemic of flu. Press reports gave accounts of many deaths. "Seventeen coffins are stacked before the church and they are dying like flies," was the word sent to the States. They overdid it that time. When word arrived in Barrow that another nurse and doctor were being flown from Kotzebue to help, they had to wire that the situation had been brought under control and no help was needed. The coffins in question had been stacked behind the church for months, waiting an opportune time for burial.

We found medical problems in Barrow very similar to those on the Kuskokwim. The nurse had improvised a dispensary in the attic of the schoolhouse and we had office hours there for the sick. We immunized the children for the usual communicable diseases, and everyone for smallpox and typhoid. Both diseases had taken a huge toll of the population in other times. There were also broken bones, frostbite, burns, snow blindness, injuries from whaling bomb explosions and the more common illnesses.

In Barrow, as elsewhere in Alaska, free medical service was available for the natives. White persons, other than government employees and Alaska pioneers, were expected to pay. The white storekeepers, traders, trappers, miners, and others privately employed who had to pay for medical services, were quite unhappy with the arrangement.

I was not sure everything the white man had brought the native had always been for their best interests, and I sat with the native council and explored a few ideas. I inquired why they had stopped using igloos as dwellings since those traditional houses required less fuel to keep them warm than the whites' dwellings; three or four stone lamps had been sufficient, while now the natives spent much time and energy hauling pitch from the oil-seepage lakes. David, the trader's son, who was on the council, cautioned me not to say more about that as I was certain to meet opposition from other whites in the village. He agreed that the natives' old customs were better for their race, and said he had told them it was wrong to take all the old customs and give nothing in their place, but he advised against encouraging any return to the old order. I had suggested the natives keep their old customs, dance, institutions, such as the kashga or dance house, and had urged that they remain a people proud of their ancestry and race.

I thought Barrow natives more civilized and cooperative than those elsewhere in Alaska; yet I found the old people, and many of the young as well, continuing to patronize the native medicine man. It seemed human nature to accept things new and modern, but in times of crisis to return to old teachings; so it was with the natives. The white man's medicine usually worked, but just in case it failed they did not throw away the medicine that had served their ancestors through the years—and so I found it when one day I was called to visit a woman suffering with chest pain. She lived in an igloo with board walls surrounded by snow blocks and covered with snow. She lay on a reindeer skin and was covered by another, but was completely without clothing. Several persons sat around; one of these I knew to be the medicine man. I proceeded to examine the patient, whom I found to be bathed in perspiration, though the igloo seemed far from warm. I concluded she perspired from fear. In reply to my questioning she explained she suffered as the result of a large blood vessel in her stomach crossing over a smaller vessel, and the medicine man had been correcting this. I listened patiently to her explanation of his medicine-making; then, after examining her and finding she suffered from pleurisy, gave her medicine to relieve the pain. It was his word against mine and I had little doubt as to whom she would believe, regardless of the outcome of her illness.

Some accidents suffered by the natives did not allow for delay, and the Eskimos often performed their own surgery. A native was caught by the crushing ice and his leg was held firmly between two great blocks. Without hesitation, his companion severed the leg with an axe and the man recovered. I heard of other such amputations, for there were those who froze and the injured flesh fell away. It was necessary for their companions to saw the protruding bone off.

The number of insane in Alaska seemed disproportionately large. At least half the white women I had known gave a history of having, at some time after coming North, a nervous breakdown. Virginia and I often discussed this subject, and our conclusion was that the long Arctic night, lack of accustomed foods, and the isolation preyed upon their emotions. And the less stable ones cracked.

One evening a dog team arrived from far down the coast. We were delighted for we knew the drivers, and it was near the holiday season. Still, their visit surprised us. It was midwinter and the weather was very cold. Their journey had required many days on the trail, but both appeared to be in the best of health; they were youthful and vigorous. I was therefore even more surprised to find they came for medical reasons. The lady had become obsessed with the idea she would die at their village and she did not want to be buried in the little graveyard. She dreaded the idea of her body being left there alone on the Arctic coast. The more she thought about it, the more she became convinced that was to be her fate. It was for this reason they set out in the Arctic night and traveled until they reached friends.

We greeted them happily and right away celebrated their arrival by bringing the best from our stores. We ate and were merry; it was good to have these congenial people come to help while-away the night. Though the reason for their visit had surprised us at first, their stay did us all good. After a few weeks, they decided to return to their home; both were in good spirits and the lady was anxious to get back to their little home and their work.

Hunger was another cause of worry to our patients. Never having faced actual starvation myself, it came as a surprise. One day Bill, a small native boy, came to ask me to see his father. I knew old Mike and his wife who lived in one of the dwellings at the other end of the village. Bill had of recent days been hanging around, offering to run errands and do chores; when done he asked for bread as payment, while all the other boys asked for candy.

I found Mike lying naked on the floor of his home with only a reindeer skin over him. Once, they said, Mike had been a great hunter and had killed many seals, walrus and bear. Now he had an ailing heart so he could not get about readily. I examined him and suggested he not eat large meals of fat, but rather keep to a light diet, more easily digested and likewise easier on the heart. I suggested reindeer broth.

"We haven't any reindeer," Bill volunteered.

"What did your father have for supper?" I inquired. "What meat do you have?"

"None," replied Bill.

"What has your father been doing?"

"He is afraid to hunt; he gets sick and he is afraid he can't get back."

"Then you'll have to go and get a reindeer. Can you get a reindeer, Bill?"

"Yes," answered the 14-year-old boy, "if I had some dogs."

"Where are your dogs?"

"They starved last year."

"How do you get anything to eat?"

"My sister and her husband gave us the fish."

"Did you have fish for supper?"

"No, I ate biscuit and water."

"Did your mother have fish?"

"No, she had biscuit and water, too."

At this I decided there was nothing they needed so badly as food and supplied them with enough. They all regained their health and not only went through the winter but were able to go eastward when spring came; there they found relatives with whom they made their home.

There were many diseases on the Arctic coast, just as there had been on the Kuskokwim—influenza and an occasional case of polio or cerebral fever. One spring morning Ralph, a young native man, came to tell me his boy was dead. That morning the father had remained home with his son while the mother went for wood. The child complained of a headache and shortly afterward became unconscious and died, the father holding him in his arms all the time. After he was dead, Ralph came for me. Though dry-eyed and calm, I knew he was heartbroken.

I accompanied him to his home, which was one of the poorer houses of the village. There I saw the boy. Nearby crouched a small girl gnawing on the hoof of a reindeer. I noticed the bone had already been cleaned so thoroughly no meat remained. Though this child had always been quite friendly, now she acted like an imprisoned, frightened animal. She crouched in the farthest, dark corner of the room and never came near me. Perhaps the medicine men scared their patients, in their endeavor to frighten the evil spirits away; she no doubt wondered what I would do in order to rid the house of this evil one. Perhaps she thought I meant her harm; I never knew.

Ralph had one more request. He wanted cloth to cover the coffin the men were making of shiplap in our basement. I asked Bert, the trader, to give it to him and charge it to my account. Somehow I could not see this father wanting for a piece of cloth to cover the rough box that held the body of his oldest son. This was so little, and it was within my power to give.

Many of the natives had poor eyesight. This was especially true of the older ones and was a great handicap to them. The men depended on their eyesight to obtain game. The role of the woman was that of homemaker and, since clothing must be made by hand, it was essential that the women see to do their stitching. I was able to purchase a set of test lenses from an optical house in Seattle and with these could fit them for glasses. For the women I made the best correction possible for close vision so that they might sew again, and for the men I was able to correct their distant vision so that they might hunt: I wrote the prescriptions and ordered their glasses. We ordered the cheapest serviceable frames and the optical house was very accommodating. The prices seemed ridiculously low, somewhere in the neighborhood of $10, which pleased me. One thing that confused the makers of the spectacles were the unusual measurements of the distance between the eyes, width of the head, as well as the distance from eyes to ears. I solved this problem by sketching a miniature likeness of those Eskimos with unusually broad, flat faces.

A far more serious problem was paying for the glasses when they came. As far as the old folk were concerned, the price might as well have been a hundred dollars: they had never seen ten dollars, and had no possible means of obtaining it. Only a few managed to get their glasses and were very happy with them. Others, I'm sure, never were able to get them from the post office or from the trader to whom they were consigned.

I had quite a number of dental instruments, mainly forceps for extracting teeth, some small instruments for scraping cavities clean; and some material for filling. Though I had never done any type of dentistry before, I found I was expected to do some emergency work. I had read several books on dentistry at Akiak so was able to do minor fillings and pull teeth.

Every week I pulled teeth that could have been saved had proper attention been given them. The natives were anxious to have their teeth in good condition. To them their front teeth were especially valuable, for the Arctic Eskimo women shaped the heavy ugruk mukluk soles by pleating them with those teeth. They had not learned to use knives to shape the shoe soles as had the Eskimos of the lower country, and besides, soles shaped with knives were not nearly as neat looking as those shaped by the teeth. The Barrow native women made beautiful clothing from the materials available and they were very proud of their work.

I endeavored only to help them keep the teeth they had until the Coast Guard cutter arrived with a dentist. But my plans for obtaining help from this quarter were not too successful. My inability to obtain assistance, coupled with the fact that since the introduction of white man's food the natives' teeth began to decay, left the dental problem unsolved.

I never came in contact with the venereal problem while on the North Coast; thyroid disease likewise did not occur except at Unalakleet on Norton Sound, where I saw two women with enlarged necks. The preventable diseases—whooping cough, diphtheria, typhoid and smallpox, which in the past carried away so much of the population—were no longer a dread to us, for fewer than 20 of the 1,720 natives along the entire 1,000 miles of Arctic coast had not received immunizing vaccine.

There was an unusual number of ulcers of the eye. Snow blindness did occur but not with the regularity met farther south. There was an epidemic of swollen neck glands, accompanied by great discomfort, which progressed until each gland was incised and the suppuration, which seemed always present, relieved. There were broken bones, seemingly more prevalent in a village where each native exhibited his jumping and balancing skill on a walrus hide. Some of the natives missed the hide and, though they struck on soft sand, there were bones broken. Some of the afflictions common to the States I found very rare here.

The natives who I had been led to believe were stoical, often had grief written on their faces, tears in their eyes and, upon more than one occasion, I saw them sob as if their hearts would break. One old native brought his wife by dog team all the way from Point Hope, nearly 500 miles. After examining her I sadly informed the husband that I believed she was dying of cancer. The old man wept so loud and long he disturbed the others in the hospital, and I could not console him. When, days later, it appeared the patient was near death, we became so sorry for the man we moved his wife from the hospital to our spare room in our living quarters. Her friends gathered there and the room was filled with natives awaiting the end. Her husband would not permit her to have an opiate to relieve the pain, and if she relaxed from her suffering and seemed to sleep he would seize her by the hair and shake her.

On her death he was very critical because I had not cured her. The old fellow said a lot of unkind things he probably did not mean. He became hysterical, and when I could do nothing to console him I left him to his native friends. I had many times seen genuine grief but never had I seen anyone have tantrums as did this man.

After a few days the body, accompanied by the husband and three natives of Barrow, was taken to Wainwright. A week later we received word the old man had married again, this time to an 18-year-old girl. "Too soon," the Barrow natives said.

I now learned that this old man was a medicine man, and I understood why he had brought his dying wife to me and became so hysterical when she grew worse and died. It was for the effect on the natives, a sort of proof of the futility of the white man's way of making medicine.

I delivered 28 babies in Barrow in the year; all but two were boys (eastward there were more girls). Midwives officiated routinely, and they often sewed the expectant mother in a wet reindeer hide; as it dried and shrank, they folded the skin down from the top, which squeezed the baby out. But there had been so many deaths during childbirth that many women came to Barrow from the east. My practice in obstetrics increased noticeably.

An old Eskimo from Point Hope told of the birth of the first white child at Wainwright. The expectant mother was a teacher, 40 years of age, and this was her first child, which in itself would be looked upon with concern almost everywhere. The husband was beside himself and as labor began in earnest an old native was summoned, he "being a kind of midwife, or she might have died."

"How long was she in labor?" I inquired.

"From four in the morning to six in the morning," was the reply. "I did it the Eskimo way; I put my knee there," (pressing his mid-abdomen).

"Put your knee on her belly?" I asked.

"No, I put a pad under it and pushed. I was not heavy enough and others pushed down on me until I felt something like crushing; then I quit. Pretty soon the baby came."

"Was it alive?" I asked.

"Oh, yes."

"Was she alive, too?"

"Oh, yes, she was fine," he said.

It was the rule, rather than the exception for a woman to be in labor for several days, even those women who had six and eight children. Here, even my own wife's pregnancy was delayed a month in spite of my using all the usual methods of inducing labor. Finding this delay common, I looked for the reason. I had thought it psychological with the native women, as their labor pains seemed always to stop as soon as I arrived. Perhaps it was because I was a stranger to the household, but when I found I was called day after day with the same result I grew impatient. Eventually I would settle down with the family, move in as it were, occupy a spot on the floor, and stay. Finally labor would return in earnest and the baby would be born.

I began to doubt that this common delay was entirely psychological. I suspected it was due to the absence of something in the native diet, which was almost entirely seafood and meat. They were not entirely carnivorous for they gathered and ate a small plant resembling sorrel which grew in the short summer season. They also boiled it and drank the liquid in which it was cooked, but this was so small a part of their diet that I disregarded it. Their drinking water was obtained almost entirely from ice and was completely free of minerals. This, I concluded, was the answer.

I looked for more proof. We could not eat the amount of fish and seal oil that would adequately supply our systems, and we began to show signs of vitamin deficiency. Our hair became coarse and dry, our scalps covered with fine scales, our fingernails brittle and our teeth tended to decay. Our gums receded, became spongy and bled readily despite the best care we could give them. We appeared to be on the verge of having scurvy.

My theory of mineral deficiency was strengthened by another occurrence. I had unsuccessfully stimulated my own wife, when overdue, using the accepted pituitrin. When the supply ship finally arrived, I hastened to unpack the drugs and I immediately gave her large doses of quinine and calcium. Labor began almost immediately and within a few hours was successfully terminated. Following this I routinely gave calcium to all pregnant women, whereupon labor proceeded normally, without the delays of the past. Unfortunately, this discovery, which I considered of great importance to these dwellers of the frozen North, was disregarded by those who followed.

Most of the deliveries were conducted in the homes. My first was such a delivery, the eighth child of the mother, with all the children living, healthy, normal—and present! All slept soundly through the proceedings though there was but one room in their house. Not a groan or word escaped the mother's lips. I was sleeping, but was awakened by one of the midwives and I got up in time to deliver the baby, which arrived in an unruptured placental sac, a condition seldom seen in white races.

One midnight, when we were particularly overcrowded at the hospital, the noise of pounding on the door woke me. Several men had pulled a sled with an expectant mother all the way across the village. I directed them to return her to her home. Miss Kerr and I hurried after them to the last house in the village behind Brower's trading post. We entered by descending snow steps into the storm shed, then on into a single small room. There was a tiny home-manufactured tin stove, an alarm clock and an enema bag and reindeer skins, and no other furnishings whatever. Across the rear of the room was a shelf about three feet wide and three feet above the floor. On the shelf and on the floor below, the family lay sleeping.

The patient was sitting on a molting reindeer skin beside the stove, which was without a fire. The room seemed very cold to us, who had so recently left a warm house. We placed the instruments in our basins on the stove. In an attempt to start a fire, one of the men cut a piece of seal fat and placed it in the stove. Outdoors a boy struggled with some sodden pieces of driftwood, and brought a few little chips of ice and wood to feed the fire. After watching these attempts and seeing the fire die entirely, we sent one of the men back for a sack of coal. In time a fire was kindled and we began melting snow for water.

The nurse and I sat on the floor. When I stood, I had to either stoop or stand directly under the ridgepole. There was practically no ventilation and, as I stood, the heated stale air caused me to feel faint, so I sat down again. I counted those in the house: there were twelve persons—and a dog. Though I began to be ill because of the stale air, the dog was faring even less well. He began to retch and an elderly woman picked him up from the midst of the skins and sleeping humanity and thrust him outside. The rush of cold air entering through the door in the process of evicting the dog relieved the situation temporarily. I sprawled where the dog had been and, drawing a reindeer skin under my chest, soon snored with the others. The nurse lay on a reindeer skin in the space in front of the stove, the only remaining place.

About 6 a.m. I heard a groan from the mother and half an hour later the baby was born. The new member of the family was a healthy boy. It did not take us long to complete our work and the nurse and I were on our way back through the gray dawn of the snowy day. The thermometer read 43° below and the wind tore at our parkas as we crossed the bleak frozen lagoon to our quarters. Miss Kerr thought she would not have missed the experience for the world, but was not anxious for another.

Following this incident the first dog mail brought a letter from the supervisor of territorial health at Juneau, saying he was fortunate in obtaining the services of a noted obstetrician from the States, who would be only too happy to help and advise us with our maternity problems, and requested that we present some of our more puzzling cases so that she might oblige. I carefully related the experience we had just gone through, and asked if she would have any suggestions as to how we might improve our technique. Although we awaited a reply with interest, our letter remained unanswered.

Since our arrival in Alaska we had been struck with the enormity of the health problem, and especially, as discussed earlier, tuberculosis. Before coming to Barrow we had been told there was no tuberculosis there. We soon found this to be erroneous. On the Kuskokwim we had come to the conclusion that the first and most important step in reducing the disease was the separation of the ill from those who had not contracted the disease. This problem would be far greater at Barrow because of the complete absence of indigenous wood for new, clean shelters. Our small temporary hospital would not help in this matter for it could only take care of emergencies, so other ways had to be devised.

I evolved a plan I thought might prove a beginning, and even if it were not perfect I was willing to attempt anything that would help. Before our supplies came I found on my inventory a thousand feet of shiplap left over from the construction of the physician's residence. But how put up a building large enough to hold 16 to 18 persons from so little lumber? Even if that could be solved I knew I'd find opposition, perhaps from both natives and whites.

Calling upon the knowledge I had gained from the Eskimo, I decided to saw the boards into two-inch strips and use these to make a framework. Sod or tundra could be placed around the framework to make a house. By afternoon I was joined by seven or eight natives who donated their services; in fact, I had difficulty getting them to stop. Soon we had the frames for 12 igloos completed, and, accompanied by my helpers, made the rounds of the village to arrange for the sick ones to occupy igloos. We found we needed to build two more igloos. Several men returned to work, and in a very short time they were completed. The igloos were placed beside each house containing a tubercular native. Some were intended for only one person, eight by eight feet, but most were for two, eight by twelve feet. Where possible, two tuberculars were to be placed together in those houses, leaving the native's own house for his family. Complete with bunks and stoves, the igloos were comfortable. Now the sick of Barrow village were separated from the healthy. Also we found about 150 gallons of paint, which I gave to the natives who agreed to paint the inside walls and floors of their old houses to make them disease-free; with the sick living in separate houses, they might remain so. Thus we made a beginning in our attempt to rid our village of its most dreaded disease.

Still, there was sadness in the village and we continued to have setbacks. One day I called on a small child, the son of Fred Appolok, the native schoolteacher. His head was drawn back, so that his back arched. With the aid of the nurse I removed some spinal fluid. It was clear, and that of cerebrospinal fever was usually turbid or purulent. I kept the test tube of fluid until morning and observed it again. A fine web had formed down the middle of the tube, conclusive evidence the child had tubercular meningitis. That day the child died, bringing the death rate from tuberculosis to 80 percent of all deaths since I had been there. I now learned that Fred had lost three other children with tubercular meningitis. His father and mother had also died of tuberculosis. Little wonder he wished to cooperate with us. He even burned all the child's blankets and clothing before I knew of it.

The health situation was bad indeed. The first baby I had delivered in Barrow died of miliary tuberculosis. I recalled that one of his sisters was hemorrhaging the week he was born. She continued living in the house for months, although she was finally persuaded to move into an igloo.

In the hospital we had the young son of Mary Otis, who had developed tuberculosis of the spine and we expected he would soon have a spinal deformity unless treated promptly.

Accordingly, we made a Bradford frame and placed him on it. His mother, an intelligent woman, sat with him at night, occupying herself by making a pair of reindeer skin trousers for me. The second night she was spitting blood. She, too, was afflicted.

One day Roger, the native who loved to make toys, came with his little son, Billy, who had tubercular meningitis. As he also had a smaller child, Roger kept the ill one in the storm shed in the hope that he could avoid exposing the little one. During a severe storm he found it impossible to keep Billy warm. It was decided Billy and Roger should stay in the house while the mother and the younger baby would stay with Roger's sister-in-law. Roger came to tell me that his wife and baby had been thrown out of his brother's house and had wandered around all night and day. I could picture her walking with the baby in her parka on her back. I advised them to keep both babies in the house, since there seemed no other way.

Next morning I answered a knock on the door. It was not yet daylight, but in the dim light I saw Roger.

"My boy, he gone," he choked.

As winter approached the cold became intense. The buildings, both the old native houses and the igloos, were encased in snow blocks. Snow swirled and covered the sides and tops of the houses; then snow blocks were laid to provide long tunnels to the entrances of those likely to be blocked by snowdrifts. Each morning the thermometer stood 40° to 50° or more below in the dispensary, and there was no stove for heating it. All the metal parts of the X-ray, the tables, the instruments, were covered with white frost, and each day we would wipe away the frost and polish the metal surfaces in an attempt to keep them from rusting.

As the days grew shorter I examined the village children more and more frequently, and one day began a check of the entire village. Examining the village children, I found four with early tuberculosis. This greatly perturbed me and, after considering what could be done to help them, I called for a meeting with the village council. I presented the problem and together we worked out a solution. We needed a hospital for the children and none was to be had. David Brower knew where we could buy a large tent some 12 by 20 feet in size, but with the temperatures then 40° to 60° below I could not see that as a solution to our problem. The natives had an idea, suggesting we build a snow house. After considerable discussion the council agreed upon it. The natives knew how to build it and they set to work. I purchased the tent; they donated the labor.

First they placed a wooden floor directly behind the sod igloo part of the hospital, then set the tent on the floor. Next, blocks of snow (approximately two feet square and a foot thick) were cut from hard snowdrifts, and a wall two layers thick was constructed all around the tent with an air space of six inches between. Another wall was constructed around the first one. As the second wall was built, the hollow space was filled with soft snow which was later packed firmly. The top of the tent was covered with boards; then soft snow laid on these. An entrance was placed in a little hallway, which separated the igloo from the snow house, and another door led into the igloo, the main ward of the hospital.

A native made a stove from a 50-gallon oil drum and installed it in the snow house. We placed four beds in the tent, completing one of the most unique hospitals ever seen. This held ten patients comfortably, part warehouse, part sod igloo and part snow house.

For the remainder of the winter we were able to keep the children happy and comfortable, and when, four months later, all appearances of their infection had disappeared and they had gained several pounds in weight and looked the picture of health, we sent them to their homes. We continued to use the snow house for patients until spring and the long days made the snow soften enough to become a hazard.

All children were given tuberculin tests and there were positive reactions in 97 percent of them. By this time the natives were tuberculosis-conscious. For example, one day a native, head of a family, came to me and announced he was spitting blood. I examined him and found the blood came from a broken blood vessel in his nose. I explained this to him since he was convinced he had tuberculosis.

"Not coming from here?" he asked, pounding his chest.

I assured him it was not coming from his chest, stopped the nosebleed, gave him medicine for his cough, and told him to remain at home until I saw him again. When I called on him, I found him established in the stormroom, completely isolated from his family. I realized he still believed he had tuberculosis and was unwilling to expose others.

Our household was not untouched. Our Mary developed tuberculosis. She grew steadily worse. Eventually she remained in bed all the time. One night she called for me. I found her sitting up in bed and there was a smile on her emaciated face, which appeared almost to glow.

She spoke in a whisper: "I'm going to see my daddy. I'll see God and Jesus, too. I'm so happy."

She looked as if she were right about her dying, and I was sure she would see her daddy and God and Jesus—Mary had always been a good girl. She continued to be irrational and must have suffered terribly, for she had tuberculosis of the throat, as did her stepfather (the native who had driven me to Kwigillingok and back, when I had first met her). At midnight she found rest. The wind blew and the surf roared as it never had during our stay at Barrow. A storm had taken her beloved father, and a storm swept down over those Arctic wastes to carry her spirit to him.

The following day broke brightly, but soon clouds gathered and the day was again stormy. Alfred and Paulie built a box and made it as nice as they could, lining it with cloth and covering it without. In the late afternoon the box was placed on a long sled with an extended towline permitting 20 or more men to pull it to the cemetery. There were many gathered and others fell in behind the sled as it moved slowly along. The box was lowered into the grave six feet down in solid ice. Andrew, the native minister, read from the Bible; then he spoke the sermon in the native tongue. Those at the graveside sang beautifully. Large blocks of soft tundra were packed about the box, frozen earth filled the remainder, a mound was neatly made and tundra covered all. One little native girl had flowers, long since bloomed, which she placed on the grave. Certainly we had never expected this for our Mary. I kept recalling the words of Mr. Stone, the *Tupper*'s chief engineer: "Alaska, the land of sadness, land of broken hearts, broken dreams and broken men."

We returned to the village, our hearts as heavy and spirits as dark as Barrow's winter night.

Tundra and Ice Pack

The Eskimo obtained food by hunting on tundra and the ice pack. His existence depended upon his skill and endurance, and those who did not possess these traits perished. Thus we bred the wise and hardy race that populated the Arctic coast. The better we knew the native, the greater our regard for him.

I listened to the tales of the hunt. Alfred described their way of hunting the fox. Seldom did they see a fox, but could hunt one by following its tracks. Within a few miles the hunter would expect to find the fox lying asleep, but he could not get close enough to shoot unless the wind was blowing. If there was little wind the hunter would stop behind a snow hummock at least 500 yards away, lie down and imitate the squeal of a mouse. The fox would stay still for a while, then come directly for the sound, knowing the exact direction and distance.

The white fox could only be trapped, as it blended with the snow and could not be seen. The hunter would place snow blocks or a set of reindeer horns beside his trap, for the fox was attracted by anything presenting an elevation on the snowscape. Sometimes a caribou would be killed, the carcass left on the snow and the traps set on knolls or snowy hillocks some distance away. The fox would eat its fill of the meat, then make for the nearest hillock, where a trap covered lightly with powdered snow closed on its leg. Traps were furnished to natives by the traders and were loaned for the asking, the only condition being all furs taken by the traps were to be sold to the owners of the traps.

The tundra supplied fish from the small streams 50 to 60 miles inland and in summer the natives went there to catch their winter supply. The fish were frozen and were eaten raw. Occasionally salmon were taken with nets in the ocean. Grunion sometimes came in great numbers to spawn on the sandy beach; as the waves brought them in the children caught them with their hands, while the women made nets of sacks and waded into the ocean, obtaining a great quantity.

The tundra also supported reindeer and caribou, and the two animals were mixing. Mountain sheep were numerous farther inland, while wolves and wolverines roamed everywhere. Flocks of geese kept inland and the natives hunted them. Salt water ducks flew close to the village and crossed

Point Barrow at its narrowest part about five miles from the village. This was called the shooting station, and here the village women and children camped and hunted.

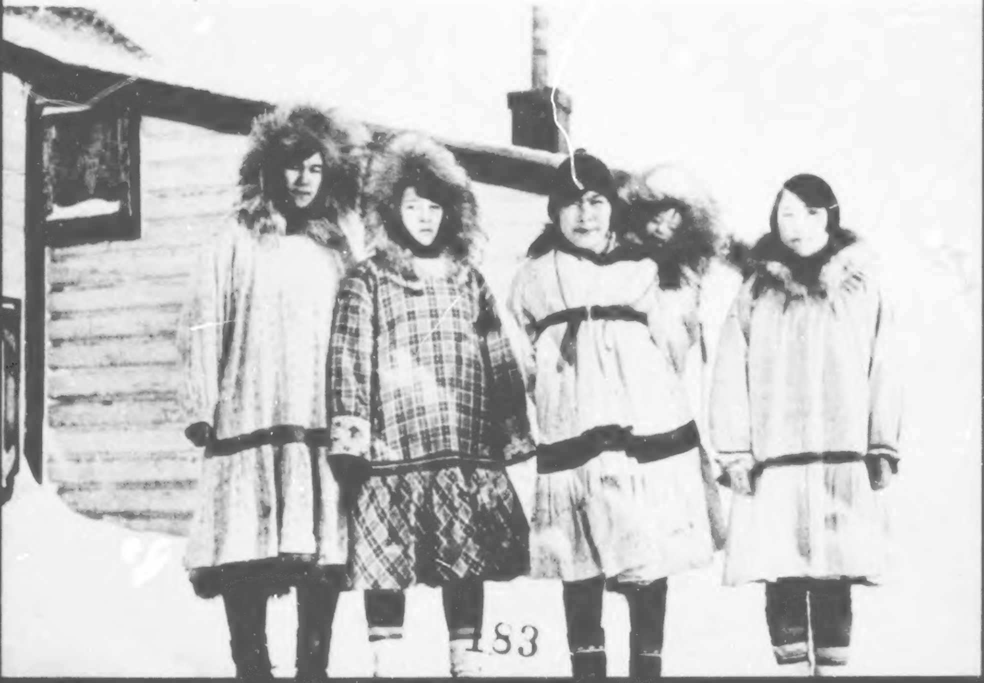
The ocean provided whales, walrus, seal (including ugruk, the bearded seal) and bear. Fowl and small birds added to the diet, and these lived on both sea and tundra. This, however, provided a diet composed almost entirely of meat.

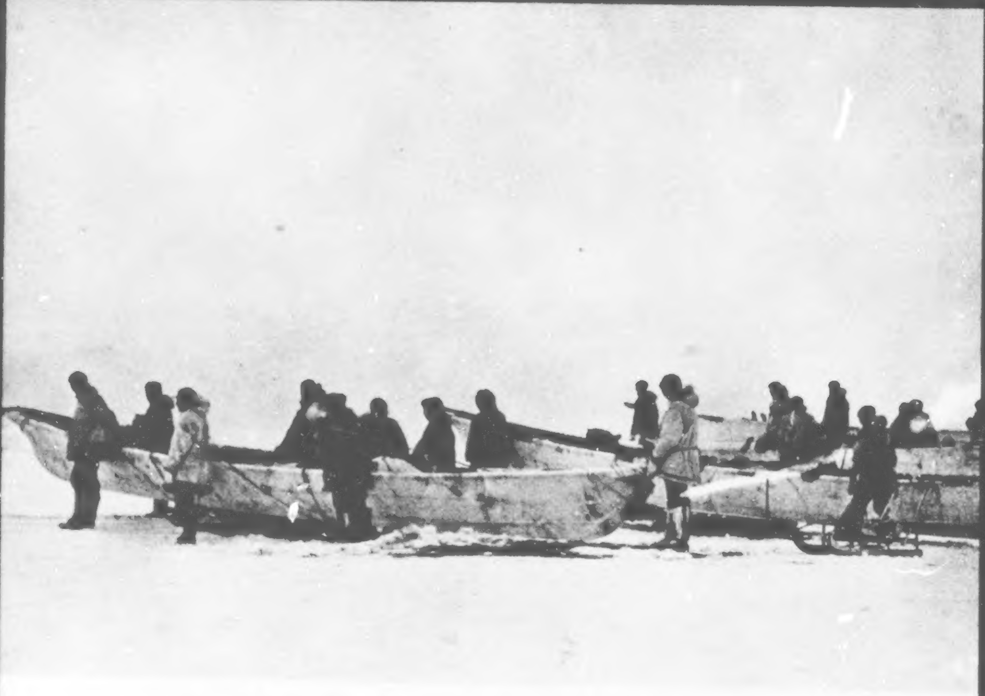
We saw the natives hunting with the seasons, in boats or on the ice. Occasionally we accompanied them. Once in mid-August we went to the Point and rode a skin boat driven by an outboard motor, though sometimes we were forced to paddle because the ice pans jammed the shore. At last we reached open water and we thought it fun dodging in and out among the floating ice while hundreds of salt water ducks skimmed or floated about us. As we neared Point Barrow the current became noticeable, as if we were on a swift-flowing river, and there were many grounded icebergs that created large eddies in their lee. When we rounded the Point the boat lurched as if someone were leaning far overboard; we were in the eddy created by the Point and here we drew the boat onto the sandy beach and went ashore. There were ancient mounds with bleached bones of whale heads and old boat racks of bones still standing, mute evidence that a large village had once stood there. The sea was cutting the bank away, exposing the contents of the old mounds. Bones and other relics of old camps were being claimed by the ocean and it appeared that soon the whole point would be only a sandbar. Farther along we came to an igloo and three wooden houses, while all about us there was evidence of others having been recently torn down. The inhabitants had moved to Barrow.

On the return trip we stopped at the shooting station. Many ducks were flying but no one was shooting. We saw large mounds, some of which were being excavated, and bleaching bones lay everywhere. The search had been started by Mr. Ford of the Smithsonian Institution, who told the natives these mounds were remnants of Barrow's oldest civilization and dated back to the year 1100. The natives' interest in digging was purely monetary, for Mr. Brower gave them food in exchange for good relics. We saw one old woman with three earthen jars approximately 12 inches in diameter and height, which appeared perfect and usable. They were made of clay, hair and blood, the same mixture we had seen in earthen vessels at Goodnews Bay and Nelson Island.

ABOVE: Two native boys with bows and arrows sit on the bluffs above Barrow.

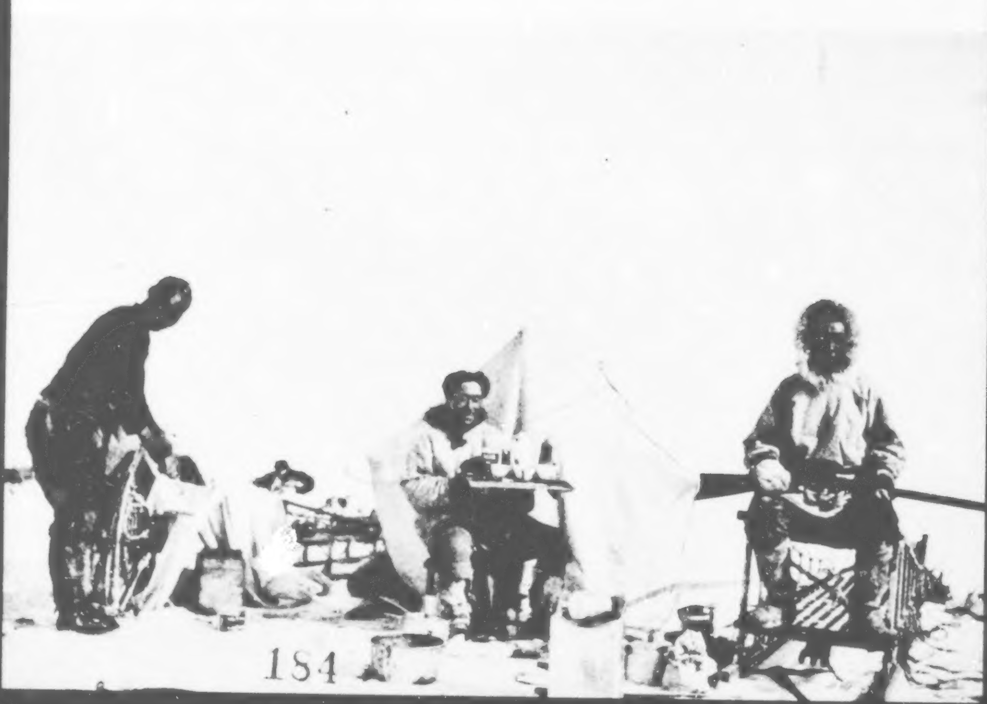
BELOW: Barrow girls in everyday dress.

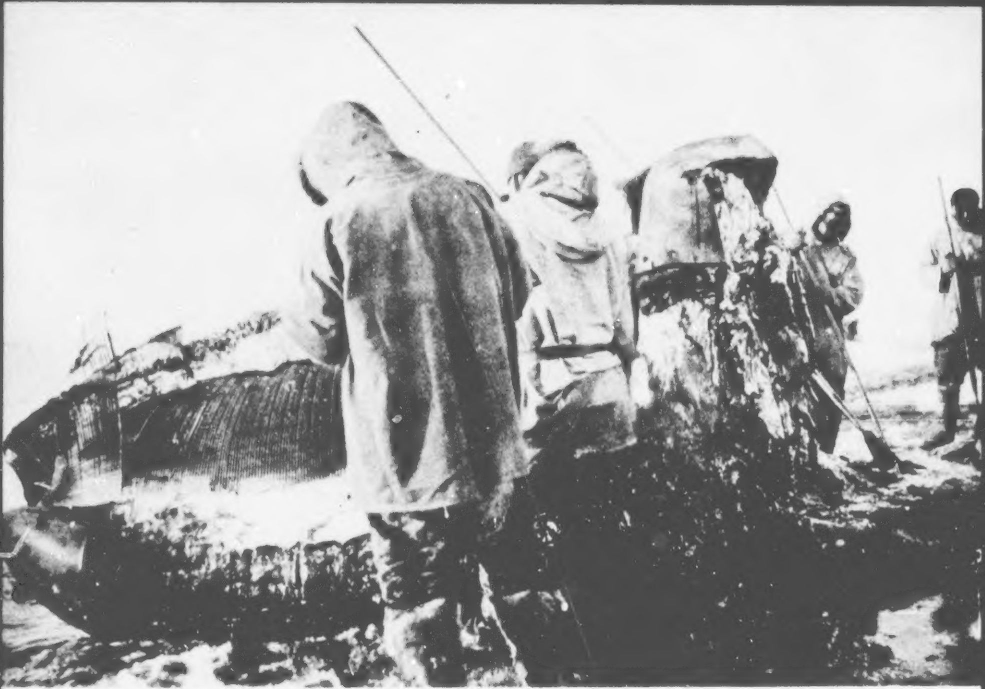




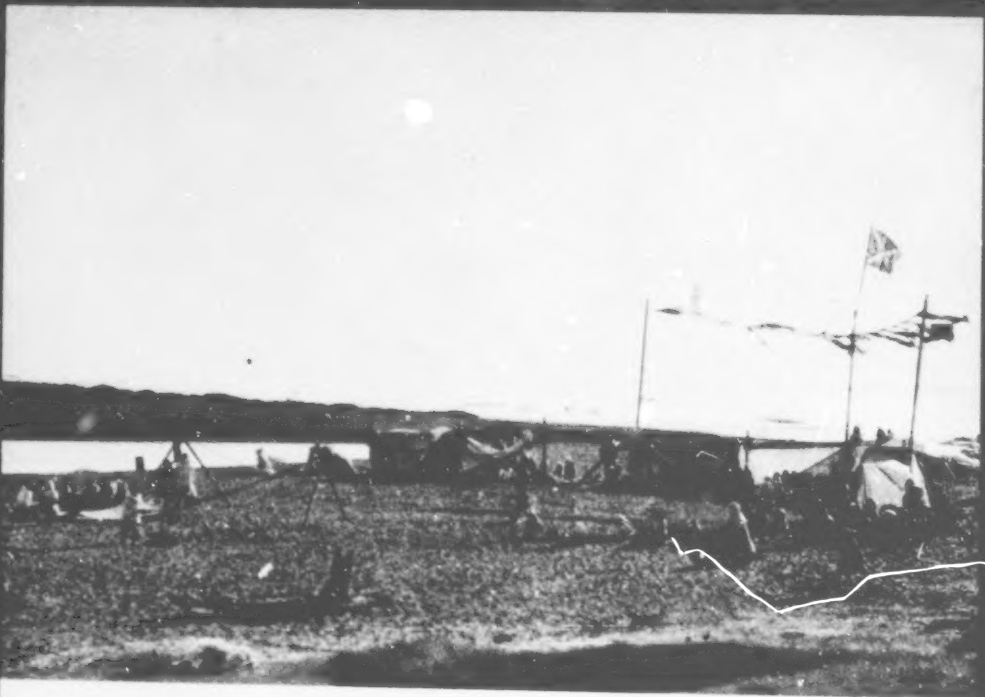
ABOVE: Whaling crews stand watchfully with their umiaks on the Arctic ice.

BELOW: Whale camp perched on an Arctic ice floe.



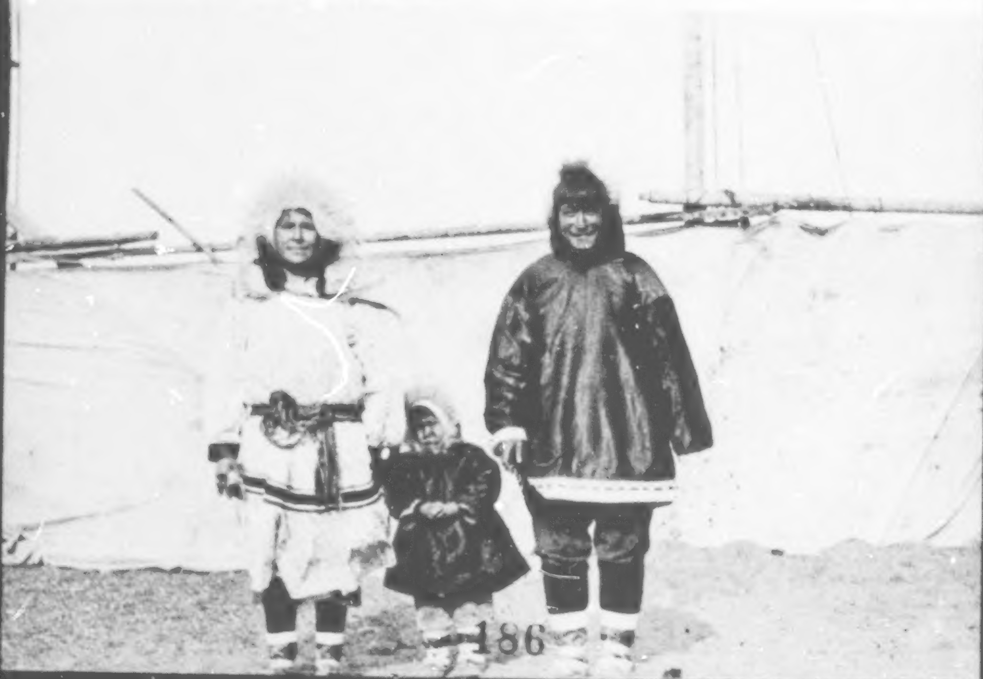


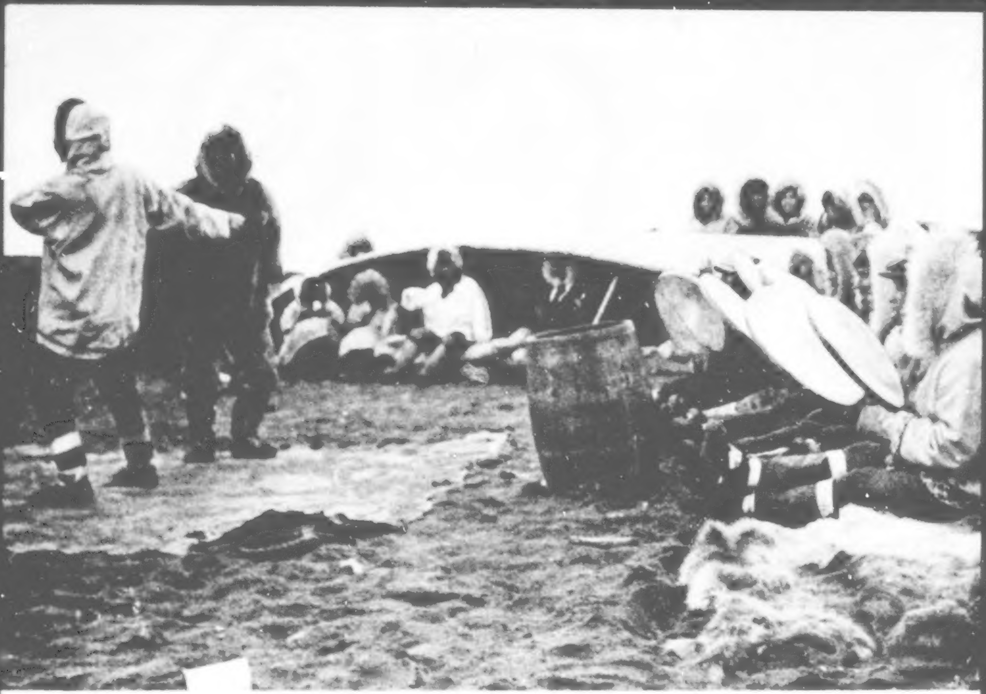
ABOVE: Barrow whalers dividing the meat from a recently killed whale. BELOW: Whaling crews sledding their craft home after a successful hunt—indicated by the flying flags.



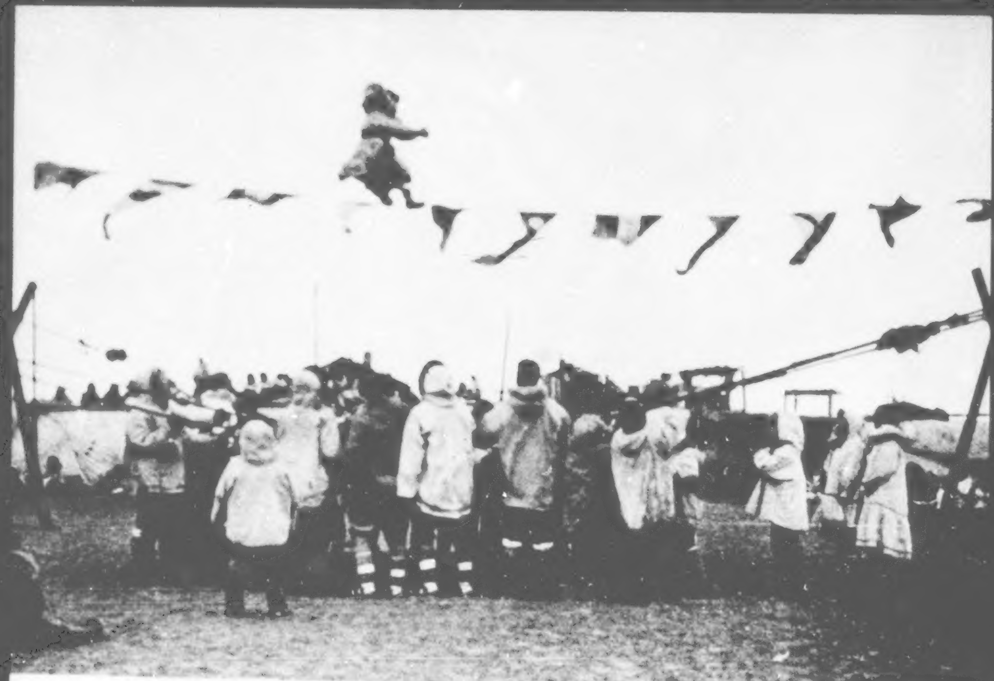
ABOVE: General view of the windbreaks, flying whaling flags and other preparations for "Nullakatuk", the celebration of a successful whale hunt.

BELOW: A native family stands for their picture in front of the windbreak during "Nullakatuk."



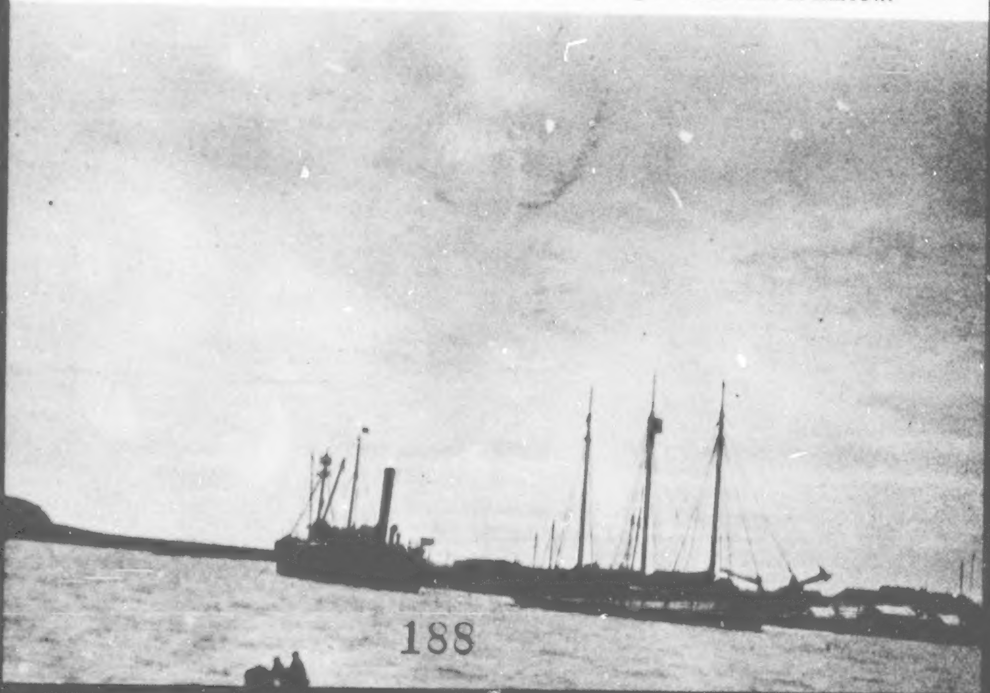


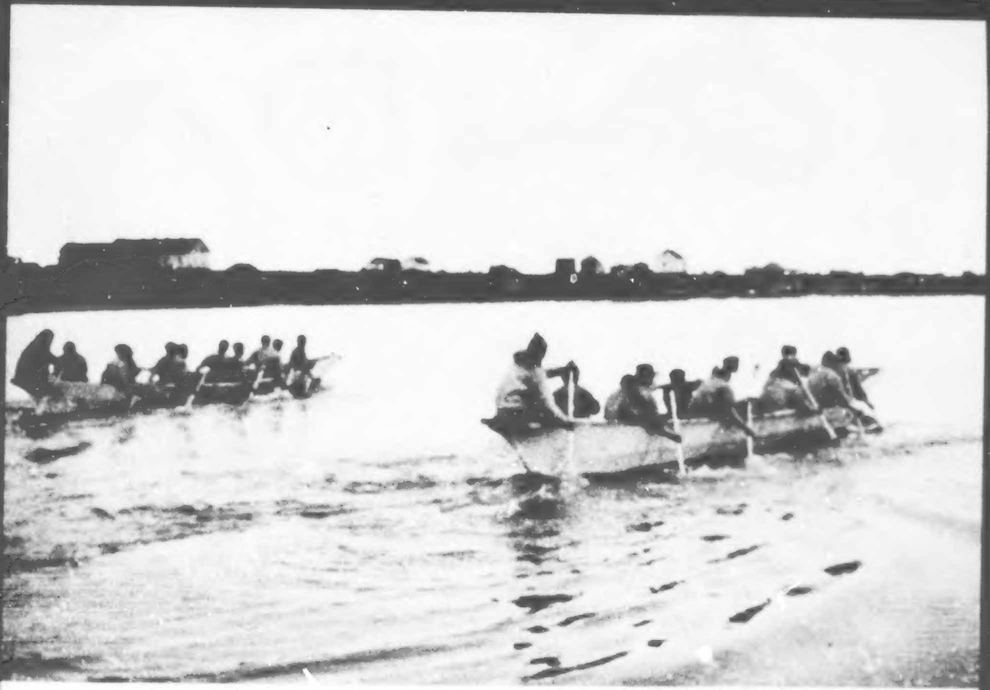
ABOVE: Dancers, drummers and a rapt audience enjoy a Barrow "Nullakatuk."
BELOW: The village of Barrow gathers to share a feast of whale meat.



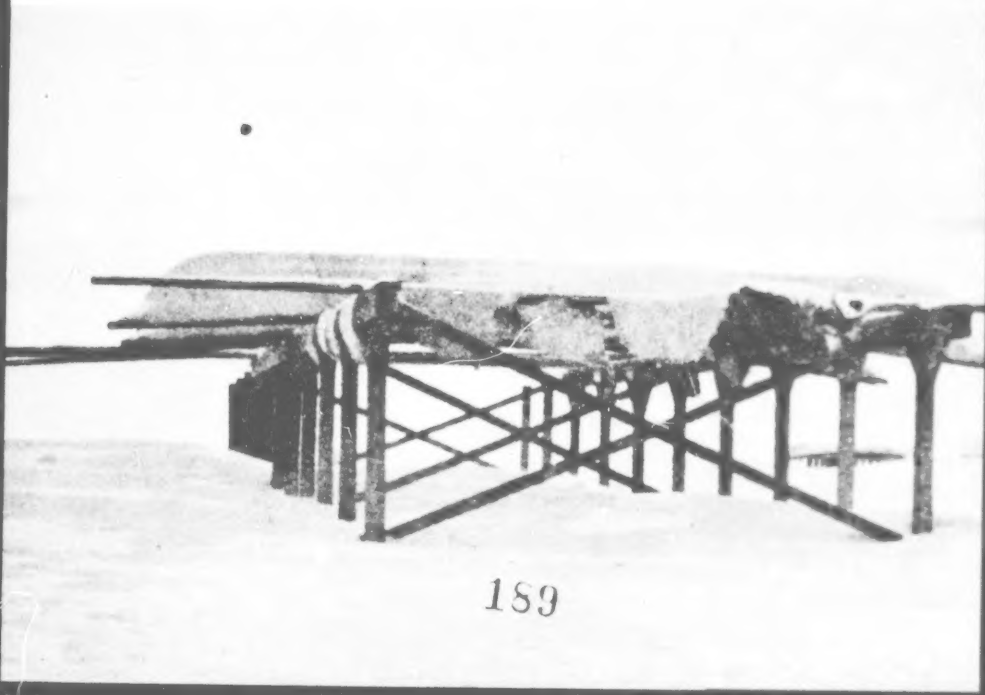
ABOVE: One of the many "Nullakatuk" jumpers tossed high in the air by the manipulation of the ropes and skins by those on the ground. Many injuries occur as the result of exuberant acrobatics during these jumps.

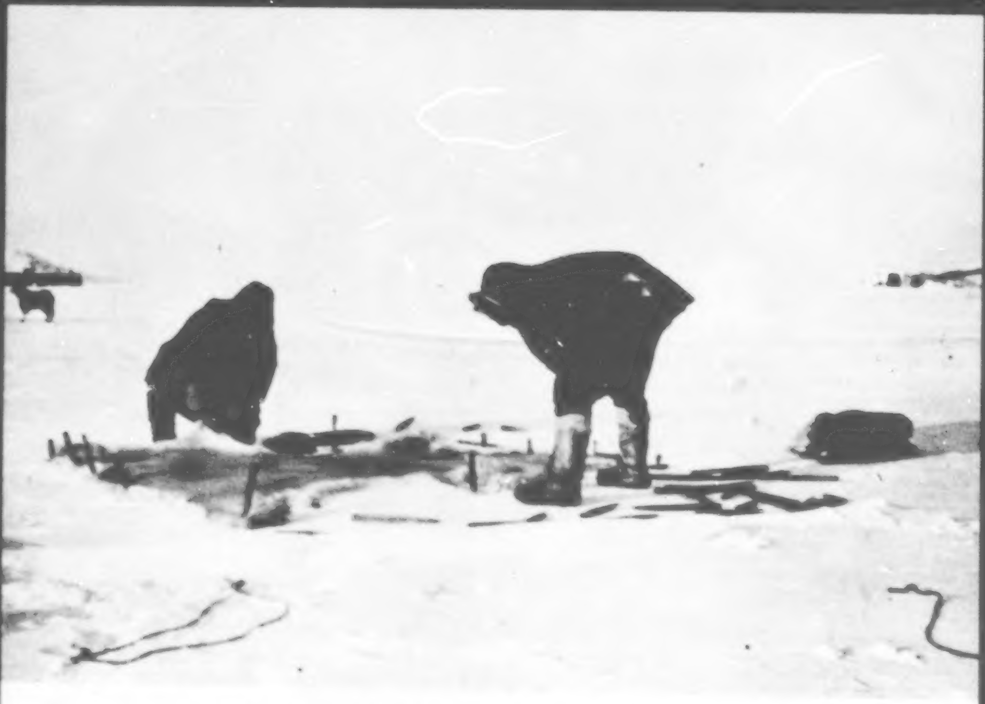
BELOW: The steamer *North Star* makes its long-awaited visit to Barrow.



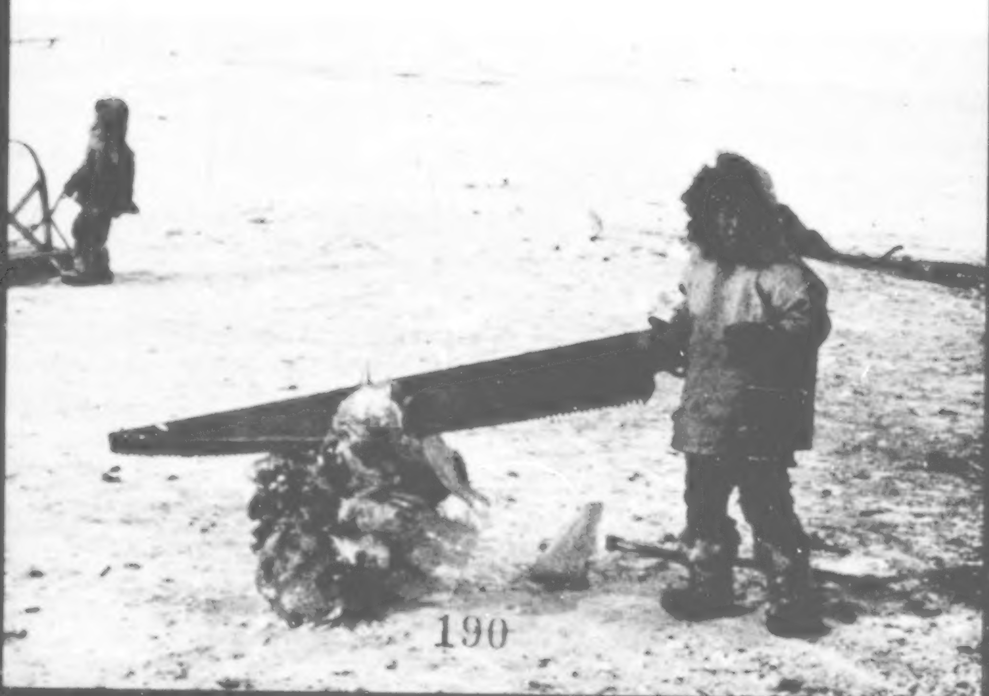


ABOVE: A heat in the annual 4th of July whaling boat races; each boat contains a crew of eleven.
BELOW: Umiaks stored at Barrow.

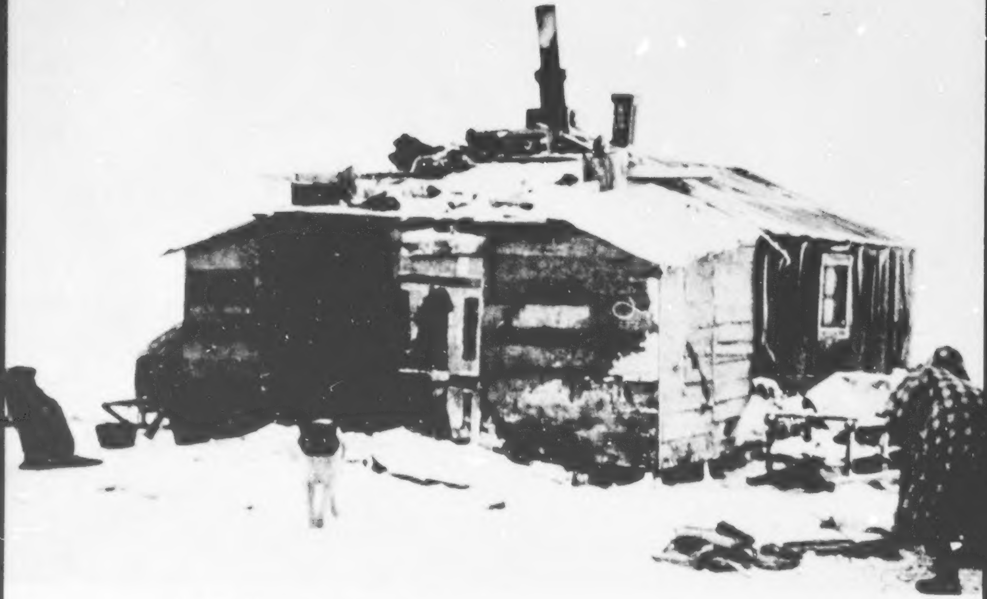




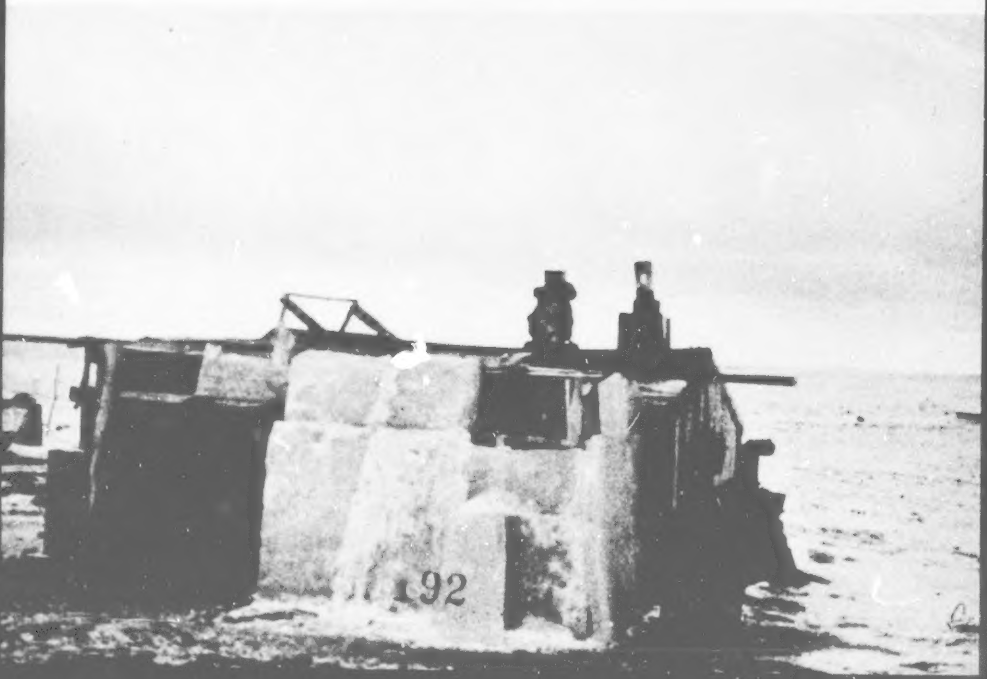
ABOVE: Two Barrow men stretch a walrus hide with pegs in the snow. BELOW: Taking advantage of Barrow's natural refrigeration, this boy saws off some walrus meat for his dogs.

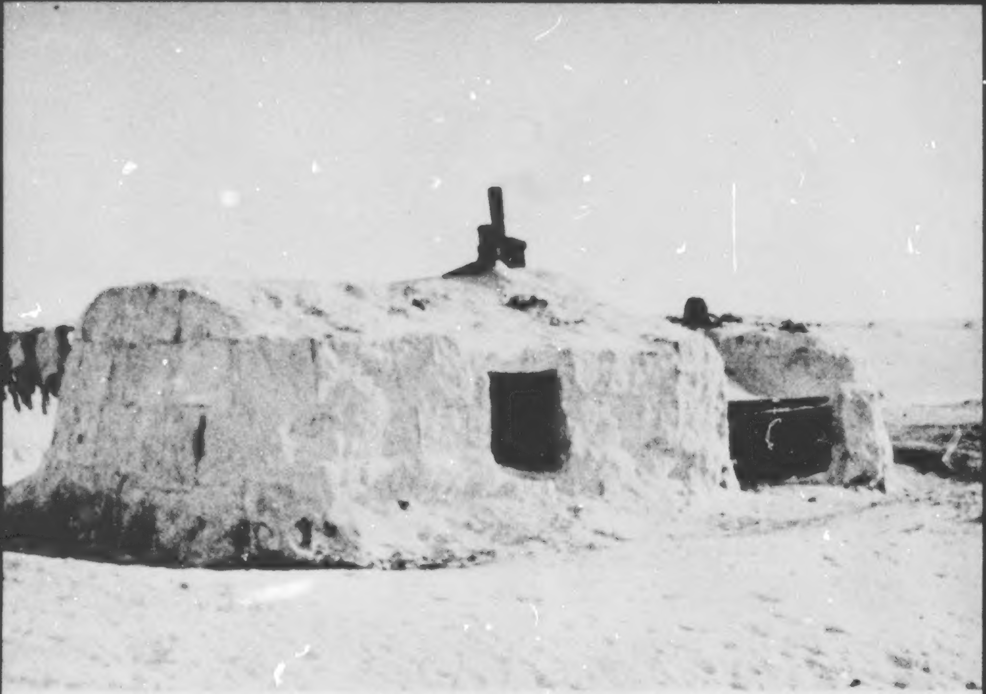


ABOVE: Typical Barrow winter food cache.
BELOW: Young Barrow boy plays the hunter with frozen caribou.

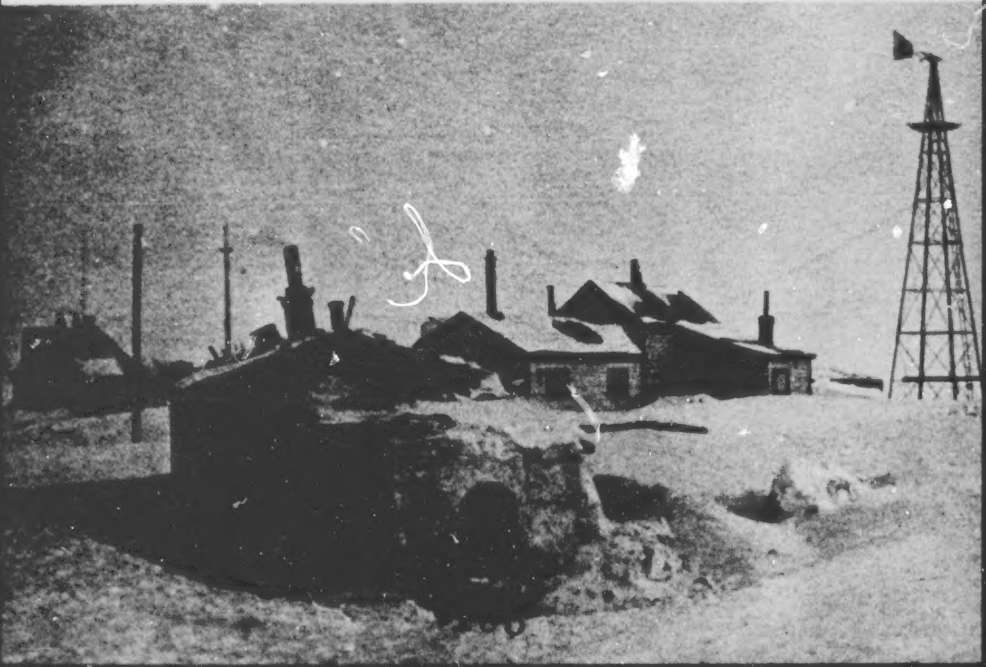


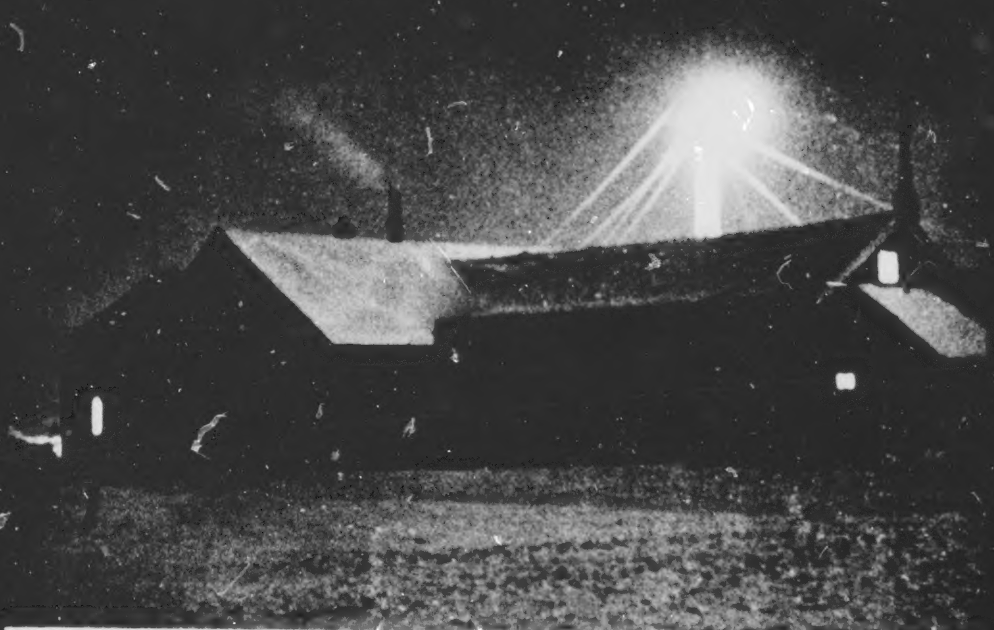
ABOVE: Native house at Barrow.
BELOW: Ice block entrance to one of the houses at Barrow.





ABOVE: Ice block covered igloo at Barrow.
BELOW: Brower village at Barrow. Native house in foreground has ice block entrance.





ABOVE: Night view of Barrow schoolhouse.
BELOW: Stored kayak frames a group of Barrow villagers.

Hunting the Ice Pack

Summer came to Barrow and the Arctic coast. The breezes were gentle and mild and the sun shone brightly. Birds were everywhere and the yellow Alaskan poppy sprang up to add color to the landscape. The people lived happily in their tents on the hillocks and the beaches.

Men and women busied themselves with the numerous chores brought on by the change of season. Dog teams still pulled the sleds just the same as in the winter, for the wet grass and moss did little to hinder passage, though there was talk of a six-week season of hard sledding. The boats seemed of first concern, and all were being repaired. The little kayaks took scarcely any time but the 30-foot wooden whaleboats and the big umiaks took much careful preparation. On wooden boats it was necessary that worn and damaged ribs and boards be replaced or reinforced, and the hull inspected. The umiaks, which were also about 30 feet in length, were made of a wooden framework over which were stretched walrus skins sewn in such a way as to make them waterproof. Most of these boats were seven-skin boats, so called because of the number of skins needed to make one. After they had been reconditioned to their owners' satisfaction, the boats were returned to their wooden racks, bottom side up, ready for instant use when whales or walrus came.

I watched all this with much interest and they explained readily what they were doing. The whales would go south in the fall and there would be many of them, ranging in size from the smaller beluga or white whale (six to twenty feet in length) to the large sperm whale (fifty or more feet). There were many other varieties, including the killer whale, which they feared greatly. The natives seldom hunted whales during the fall, especially if the summer had been good and their meat cellars were already filled. It was more convenient and probably safer to hunt and preserve the meat when the ice was present and the weather was cold. Whatever the reason, there was less interest shown in the fall migration than in the spring.

The shore ice left to join the great ice pack. Some days the water was filled with floating bergs and then for days there were none to be seen. These floating bits of ice took on strange and bizarre patterns as they were weathered by the sun, wind and water, and we could picture them as strange animals and all sorts of things.

When the water became rough and the waves and swells were large the natives said the ice was far out; its return was foretold by the appearance of a halo above the water that they called the "ice loom." As the halo drew nearer, a thin white line appeared at the horizon of the blue water. The ice moved with the current, sometimes running north, sometimes south.

The days began to shorten and the natives received word by the grapevine of walrus being seen far down the coast to the west. They began to watch from where they worked and often we would see them in the crow's-nest of the mast behind the school. They listened for the bull walrus's bellow, which sounded like distant thunder. Walrus herds came past riding the old ice pack in late summer. They dozed on the large cakes of ice, especially on sunny days, preferring to stay in the water during the rainy weather. All was in readiness; boats repaired, crews selected, and everyone anxious to be away. The man owning the boat and gear also furnished the food and gasoline for the boat's engine; the men shared equally the meat they obtained, the boat owners keeping the walrus tusks. The ivory thus obtained was worth 50 cents per pound.

As the herds drew near the boats were launched and the hunters took to the sea. They had but one great fear, the "drop" or "jumping-off place," the point of no return, which lay north and east of the Point. The Arctic Current usually flows rapidly northwest from Point Barrow and into the sea beyond. In order to avoid this danger they began their hunt by traveling down the coast toward Wainwright, and after several miles turning out to the ice pack. Sighting a herd of walrus, the hunters carefully kept out of sight until they could draw near the ice pan where the animals lay sleeping. As a rule, an old bull would remain awake and on guard.

The hunters would try to shoot as many animals as they had boats to haul the meat; the average walrus weighed approximately two tons and only six or eight adult animals could be taken at one time. Then they fell to and chopped the meat up and loaded it into the craft. Even though the hunter and crews hurried they often drifted far and were always glad when they again sighted land and knew they had not drifted too far out.

One hunter told of seeing a wounded walrus make its way into the water where two or three others swam about it; they might succeed in carrying it away unless the wounded animal was too badly hit. "It's kind of pitiful," he said.

Often the ice pack moved far offshore and would remain for days on end but when it came near the boats put out regardless of whether it was day or night. The hunters slept on the way to and fro. When there was much open water between shore and the ice pack the wind shipped up large waves, forcing the hunters to stay on the pack or run to a river entrance for safety. During bad weather there was much uneasiness in the village and none slept; all watched on the weather and prayed that their hunters might return safely. In times past many of them had been lost, carried away by the current beyond "jumping-off place." Only when all had been accounted for did the others in the village return to their homes or sleep. It was an exciting and dangerous life the Eskimos lived.

One August morning Virginia and I went for a walk along the sandspit. The beach was strewn with ice and huge ice pans were grounded offshore for a quarter of a mile or more. There seemed to be more activity than usual. Whaleboats were being pushed into the water and the crews were getting their gear together. Walrus and ugruk had been sighted far out on the ice pack. Two boats nearby were being readied; I wanted to join the hunt and returned to the house for my camera and gun. The boat I chose appeared to be very flimsy in spite of its thirty-foot length and eight-foot beam. The ribs were about an inch square and spaced eleven inches apart. The inside bore several patches of what appeared once to have been an apple box, the outside numerous strips of tin from five-gallon containers. There was an ancient 15-horse Lycoming motor in one, and the other, which we took in tow, had a mast for a sail. We put out and I counted our crew, 13 (which by now I considered my lucky number). One girl and three brothers all under 14 years of age operated our boat; their father, Andrew, the native minister and owner of the boat, could not go.

We worked our way out through the ice, at first pushing the ice pans apart. After a while there was more water separating them, and the motor was started. We set our course down the coast since the boats that had gotten away first were already hunting the nearest ice. We continued on for two hours until we had passed all the other boats, then pulled to a large ice pan and disembarked. Some men procured ice and others filled a five-gallon can with water from a beautiful pale green pool on the ice pan; since this water was not salty, it was to be used for making tea. The natives could distinguish the salt and fresh water by the coloring.

The Arctic stillness was broken only by our voices, the gentle lapping of the waves against the ice, and the birds. But now there was another sound, almost like low thunder, borne on the wind. This was what we were listening for, the voice of a bull walrus.

We took to the boat again and went toward the sound. I was excited about the impending adventure, and so were the natives. Three hunters took their places in the bow of the boat, and, with their guns in hand, scanned the waste before us. These men I knew were special persons, for the men designated to do the shooting were carefully selected and much honored.

Our boat moved steadily on. The girl brought out a sack of flour, poured some into a small metal pan, added water and stirred. Next she rolled the dough into little sticks, and readied a small gasoline stove. She then produced a can of seal oil and soon was cooking doughnuts, which she deftly turned with a long wood splinter. Tea and doughnuts were passed to all on the boat.

The engine developed a pounding noise, which began after we hit a submerged ice cake and bent the propeller shaft. The noise and vibration became more pronounced and the natives feared the shaft would break. We headed for the nearest large ice pan and all disembarked. Everyone pulled on the boat until it slid up on the ice and the natives fell to work. The propeller and shaft were removed and placed on a very smooth piece of ice. Our mechanic and engineer, eldest son of the boat's owner, would not let anyone assist him with this work. He looked for a time at the long iron shaft, turning it gently this way and that, hammered it here and there, then turned it some more. When satisfied with his work, he permitted the others to assist him in replacing it. We slid the boat into the water and when the engine was started the knock had disappeared.

Now we had other troubles: water poured into the hull through the seams, so that two hand pumps were kept going steadily. The girl and one of the boys took up the flooring and pushed rags into the seams to somewhat diminish the flow of water. The engine stopped from time to time and our engineer cheerfully—nay, with apparent joy—tinkered with it. The lookouts in the bow of the boat kept glasses to their eyes, scanning the ice pack about us. Once they sighted an ugruk on the ice to our right, and we stopped at the ice pan. Five hunters with guns set out, running on the slippery ice, jumping little streams, wading big ones, crawling on hands and knees, then on stomachs, to be out of sight of the ugruk. Several aimed their rifles at him. As we heard the rifles we also shot at another ugruk nearby, and four ugruk fell into the water. They did not rise, and were lost to us.

We heard walrus to the south—possibly four, five, miles away, the hunters said. Passing a boat, we saw that its crew was skinning a polar bear. The wind and weather grew progressively worse and a canvas was pulled over the boat, under which the natives sought shelter from the snow that slashed at their faces. I crawled forward and sat in the prow, usually occupied by the hunters, and now and then shot at an ugruk or seal swimming in the water, but with little success.

Suddenly there was a great commotion, and the hunters in both boats were speaking in native tongue and evidenced much excitement. They had noticed a bear appearing as a tiny yellow spot on a field of dark ice. We began to circle. Our bear was not to be seen for a time. Then we saw him rise up on his hind legs and stand like a man, craning his neck to see us better. It must be an old bear, the natives explained; old bears are yellow, younger ones white.

Our boat touched the ice pan and the natives started running across it. I jumped from the boat and meant to run but to my astonishment—not to say embarrassment—got nowhere. My feet moved but my rubber-soled shoepacks had no traction, so I returned to the boat while the men continued after the bear. Our boat went on around the ice pan, which proved to be about 30 acres in area. When we returned, the men were waiting. The bear had gotten away, perhaps to another ice pan or more likely had taken to the water. Bears come ashore sometimes when the ice pack is far out, and so the natives believe they can swim many miles with ease.

We passed another boat drawn up to an ice pan and saw that they were skinning two bears. The ice was black, indicating it was old ice and part of the big pack, making the chances good that we would see more bears. The sun had set and it was very cloudy. I was using my camera in an attempt to get pictures of the ice floes, when there was a murmur of excitement. On the floating ice in the water just ahead something moved. It was a bear. I lifted my rifle. Two men sprang to my side.

"Go ahead and get your picture," Alfred advised. I snapped several times as we approached, then again picked up my rifle, intending to shoot after the other men had shot.

"Shoot!" Alfred commanded. I was surprised, but realized they were giving me a rare opportunity. Few white men have killed polar bears, and many natives had never shot one alone.

"Shoot! Shoot! Shoot!" they urged.

The bear was swimming away from us and only the tip of his nose, eyes and top of his head were out of the water; the wake following covered the rest of him. I knew that a bullet would not pierce the water and his thick skull.

"Wait! Wait until he turns; wait until he turns his head," I begged, realizing that my 30-30 caliber carbine was much too small for big game, and that I would have but one shot.

As our boat drew nearer, I kept the rifle to my shoulder, my eye glued to the sight, praying that the bear would turn his head to present a vulnerable spot, and holding my breath lest the natives should grow impatient and begin shooting first. At last the bear turned, heading directly for our boat: I squeezed the trigger of my gun. The shot was a fortunate one, striking exactly as I aimed, just behind the right ear. He died instantly, never moving a muscle after the bullet struck. The bear would have boarded our boat in another few seconds, I suppose. The natives in our boat evidently thought so, too, for someone had been calling out, "Turn the boat away!"

A native struck with the harpoon, missed; then, as the second boat passed, one reached over and caught one of the bear's feet, another slipped a loop of rope over it and, towing him, we drew up to a small ice pan. As darkness closed in, the old fellow was skinned. He measured ten and a half feet in length. The meat of the polar bear is greatly prized. By the time we were again on the way a pot of it was boiling, and more was cooked on our trip back to Barrow.

During the night I noticed the men kept looking at little metal compasses which they fished from their parkas. When I learned we had had only about 15 gallons of gasoline when we started, I knew why they were worried; because of shortage of fuel we had to return to Barrow the shortest way. Eventually we left the pack ice, and the ocean became rougher. The natives estimated we were 25 or 30 miles offshore, however the wind by now was carrying us toward Point Barrow. I recalled the sudden gales that swept these shores and realized the danger these men faced while hunting.

I had my compass with me, a large and very sensitive one, which was a relic of my days in the Forest Service. Using this, we set a more accurate course. The men not running the boat slept. Snow struck our faces like small shot and we grew cold and most uncomfortable. We sat with knees bent, with our parkas pulled over them to cover our legs and feet. At intervals all night long we ate the boiled meat. The men insisted I eat, as they did, by grasping a large piece of the meat between my teeth while holding it with my left hand and cutting it into mouthful size with my knife, held in my right hand. I had treated many natives for wounds to their hands received in this manner, so took care.

At daylight we reached Skull Cliff and soon were back at Barrow. We learned that 15 bears had been killed by the villagers that day, the greatest number killed in one day for many years. I was greatly surprised when the natives told me that I was the first man to kill a polar bear, unaided, at Barrow; and everywhere the villagers congratulated me. Ancient custom dictated that a hunter upon killing his first large animal, such as a bear, give a feast for the other men of the village. Already the natives had divided up the meat and taken it to their homes, and I took the skin for a souvenir of the hunt, but also paid the crew for their share of it.

Fall view out across the Arctic Ocean from the beach at Barrow.

Preparing for Winter

With winter approaching, we surveyed our situation. Our supplies, after arriving by whaleboats from the *North Star*, had been stored away in our attic, along with all the hospital provisions. Now the skies seemed to protest, the wind became a gale carrying a cold rain that soon turned to snow, and ice covered everything. Our dwelling had thick insulated walls, and the windows had three panes of glass. The house had one coal-burning heater and a coal-burning cookstove in the kitchen. The fire that had destroyed the hospital spared the residence and a small warehouse; the latter I decided could be utilized as a dispensary.

The goods unloaded from the *North Star* included medical and surgical equipment and supplies, oil furnace, oil cookstove, light plant, condenser for a water system, pipes for the heating system, and a large supply of fuel oil. Many of these items were intended for projects the government was planning to undertake the following year. It did not occur to me that I should obtain authorization from the government, so I planned to make the best use I could of all these things for the coming winter. Recalling I had met with the Barrow Native Council the first week of my arrival, I thought this organization the proper one to consult; so, calling on the natives, I explained the situation. I wanted to put the dispensary and cook's quarters in the warehouse, to which we would add a sod igloo for patient's beds. By addition of a room at the back door of the residence, we would have a service room. This rear door was four feet above the ground, which sloped gently down to the water of the lagoon separating our village from Brower's. I supposed it would require but little excavating beneath the room to form a basement to house the boiler and the light plant. We agreed these projects might be finished before hard winter set in.

Alfred Hopson, son of a whaler who had married a native woman and stayed in Barrow, and Brower's son David were willing to undertake the job with the help of the other men. Alfred was made foreman of the carpenters and David foreman in charge of installation of equipment. We began.

With the warehouse as a beginning, a crew made the framework for the sod igloo at the rear of the wooden building and connected it by a door, while another crew cut sod out on the tundra. Then together they brought the sod and covered the framework, next adding a storm shed entrance to the front and rear. When all was finished we had a building with a waiting room, treatment room, cook's quarters, kitchen, and a ward fitted with six beds, a stove and bedside stands. I was very proud of this for it seemed to answer our medical needs.

However, the project had not been without obstacles. While David's crew had been digging the tundra away for the basement room—a simple problem, I had thought, as the hole would be only a few feet deep and about 10 or 12 feet square—they discovered the ice unbelievably hard and digging almost impossible. After working for days, armed with two dozen new pickaxes, the crew had practically nothing to show for its labor. The natives, much to my surprise, moved in an old iron steam boiler that I had never seen before. It was perhaps two feet thick, and as high as a man's head. It had a firebox that they fed with coal. Steam escaped through a long steel pipe attached to the boiler by means of a rubber hose, and with this aid the work went much faster. It took considerable ingenuity to construct it and keep it working. The thawed mixture was mostly water but with just enough mud to make it very slippery. One afternoon the workmen were moving the boiler and one of them slipped; both boiler and man fell. The man was unhurt but several of the boiler's pipes were broken. The workmen remained far into the night to repair it. They were all caked with mud and looked so tired I finally asked them to stop and get a night's rest.

Eventually the excavation was completed. A floor and walls were constructed and the gravity-flow heating plant and light plant lowered into place and the carpenters rapidly completed the room. Then we found there were no pipe dies; none had been sent and there were none in the village. It appeared we were stopped for good. I wired Fairbanks and learned there were pipe dies up to three inches in size that I could purchase for $40. An airplane was about to leave Fairbanks for Barrow; the dies were flown in, at a cost of $50—one dollar per pound. We then were able to install the steam pipes from the boiler throughout the house.

We now had hot and cold running water in the house, which the natives installed along with the furnace. A pressure pump was connected with a 500-gallon tank in the service room. This tank was filled with ice which melted and served as a supply of water for the pump. Since there were no coils for the furnace, David made some and placed them in such a manner that the flame warmed them. Such ingenuity as this was typical of the natives. Here Eskimos, who had never seen such installations, were able to put machines together, even construct parts, and they operated perfectly. Little wonder we looked on the natives with admiration.

Virginia and I were always busy and we enjoyed our work and play. October 13th began cold and windy; the lagoon had frozen over and the ice was smooth but thin. The village children were skating. I fashioned a sail from an old army poncho and soon I, too, was enjoying the skating. The wind took me with great speed across the lagoon. I skated farther and farther out and, though I heard the ice sing as if bending beneath me, the wind carried me so swiftly I paid little attention; but once as I neared the middle of the lagoon the wind slacked off and I realized I was breaking through the ice. I spread the sail in front of me on the ice, then polar bear style, as my legs dropped into the water, I spread arms and legs far apart, throwing my body flat on the ice. I had earlier asked the natives about the depth of the water in the lagoon and had been told it was shallow, so for an instant I thought of letting down, hoping to stand on the bottom, but thought better of it. As the wind began again, I tipped the sail to catch the wind; the sail filled and pulled me onto stronger ice; then I drew my legs, and skates, under me and soon was moving swiftly to safety. My clothing, from head to foot, was frozen stiff in seconds. Later, I was told the water was 18 to 20 feet deep where I went through the ice. I learned what the natives did when their clothing became wet. In order to avoid freezing, they strip their bodies quickly. Instantly the water in their clothing turns to ice. They quickly beat off the ice and get back into their now dry clothing.

We noted changes in the season. The days grew shorter by 20 minutes each day. Now the sun came up at 8:30 a.m. and set at 3:00 p.m., and it seemed the sun just skimmed the southern horizon, even at noon, never more than a few degrees above it. The colors in the sky were delicate and beautiful. The weather grew colder and the natives began cutting thin, clear ice that they placed over the windows of their houses for storm windows; some used walrus bladders instead. The remainder of their houses were surrounded by walls made of snow blocks, these cut with long knives, from the snowdrifts. They advised me it was time to cut our yearly supply of ice, and they went to a lake about three miles distant and sawed ice blocks. These blocks supplied us with water the entire year.

The natives butchered reindeer to supply their needs for the winter. First they drove a herd numbering nearly 2,000 to a point about ten miles from the village. After selecting which deer to slaughter, four or five men were chosen to do the shooting. The animals killed were graded one, two, three, etc.; about 150 grade one were killed for the market. The other grades were divided around so all natives got some of each grade. Old deer sold for $2.00 each and were used for dog feed. Choice deer sold for six cents per pound, though the natives complained that the price was too low. They were always talked out of raising the price by the whites of the village.

I checked our cellar storehouse. The doctor preceding me had purchased 40 deer for the hospital. The cook used only the hind quarters, so there were 40 front quarters, and 10 deer had been given out on loan. I purchased 10 for the coming year, yet to learn that meat frozen for a long time becomes dry and loses flavor, until it is almost tasteless.

The weather became colder with the disappearing sun. Paul used to run in and out of doors at will as he played with the Eskimo children, and one day he frosted his cheeks and chin. At first, we did not notice the hardness of his face. Only after it thawed and grew bright red did we realize what had happened. Thereafter we tried to keep a better watch on him and when he came in with hard, lumpy cheeks we rubbed them with melting snow until the frost was out.

The dog mail was to start for Kotzebue. There would be three dog mails during the year, then one by ship in the summer, so we hurried our letters. The wind came and carried the snow so thickly one could not see. Ned, the mail carrier, kept delaying his departure. His sled needed repair, he said, but all knew he was waiting for better weather. At last he departed and we and the village settled down to our routine for the winter.

Holiday Season at Barrow

There was nothing spectacular about the longest, darkest night of winter. It was 23° below with a southwest wind piling the loose snow into long ridges wherever there was an obstruction. At 10 a.m. a faint light along the southeast horizon announced the approach of twilight; it faded from the southwest horizon about 4 p.m.

As the holidays approached there was much activity in the native homes. For weeks all had been preparing for Christmas. All the natives wished for new snow shirts and boots and the women worked as fast as they could to produce them. The men began drifting in from the trap lines where for the past weeks they had maintained traps over hundreds of miles of barren country. One man got five foxes, but most of the trappers returned with none, or only one or two. Considering that they had large families to support and that hunting was their greatest source of income, the future looked dark.

We all went to the school program. The children were clean and neat; some were dressed in modern suits and looked very modern themselves. One boy had finished the eighth grade and some of the menfolk complained he did not want to earn a living by hunting like the other natives but hoped to get a job using a typewriter.

The church had a program Christmas Eve and everyone in the village attended. Afterward all went from house to house serenading with Christmas carols. They began on the "station side," Brower's village, and it was 2 a.m. when we heard them at our door. There were so many children they filled the house. We gave them apples to eat and played a few records for them, to which they listened with amazement. They continued across the village until all had been serenaded, hours later.

I had planned to take candy and nuts to each house, but Alfred said the natives would be more pleased if I placed each present in a bag and put it on the church Christmas tree. He was right, for they thrilled at hearing their names called out. I sat while the minister distributed a package to every family. Steve Hopson appeared disappointed when the presents had all been given out; he had put one on the tree for me and I had not received it. When I returned home I found it had been delivered there. It was a fine piece of ivory (a walrus tusk, finely colored because of its age), a souvenir from the Wiley Post plane. Another native presented us with several beautiful fawn skins. Still another gave us an Eskimo doll, dressed completely, even to small leather mittens. Its parka was a replica of that worn by my wife, a Kuskokwim parka, which was different from the Barrow parkas, and the face was a likeness of a woman of the village.

Later Christmas evening the children and many grownups came again to listen to our music. They stayed until nearly midnight when I sent them home. There were two things they could hardly believe: music from a radio and water from a faucet.

We were warm and comfortable when indoors, and our food and that of the hospital was stored well enough so long as our furnace operated. So far, at least, the steam pipes filled with steam; but were the furnace to go out, even for a short time, the steam would condense and water anywhere within the line would freeze and split the pipes. We could not possibly make repairs until summer, and we would be without heat and all our food would freeze. With so much at stake, we would get up at two-hour intervals and inspect the furnace; not much of a chore but it meant going into the basement and never permitted uninterrupted sleep.

The mercury eventually reached 60° below and once during routine inspection of the basement I found the fire out and the room rapidly cooling. The gravity flow system, with a barrel of heating oil outside on the snow beside the boiler room, was connected to the furnace by a three-quarter-inch metal fuel line. The barrel was full of fuel, so I supposed some impurity or water had clogged the line. I filled a bucket with oil and with a ladle fueled the furnace for two hours. Eventually we found that the oil would not flow through the pipe during temperatures of 50° or more below zero. The problem was solved by building a warming house for the fuel, large enough to house two barrels at a time (a Coleman lantern furnished enough heat to keep the oil flowing).

The dog mail had left Barrow January 2nd, and we began anxiously awaiting its return. We had b[illegible]ttle news of the outside world, even from the radio, and we wondered what was happening. About six weeks later the mail returned with many Christmas cards and packages (from both the States and the Kuskokwim).

Return of the Sun

I recall how we felt when the sun went away. We would not see it again for 60 days, at least. We even felt the possibility that it might not come back at all. The days grew darker and still darker. Only at midday did we see twilight and that only above the southern horizon. Then that twilight began to lengthen, and day by day grew longer and lighter. Now it had been away 62 days. We watched the southern sky; a wisp of fog came to lie upon the purple snow and we retired to our work or reading and waited another day.

The sun came into view a little after eleven. I shouted to Virginia, she called to Mary, and we all stood spellbound gazing, holding our breath lest it go away, while the walls lit up with its glow. The deep blue of the horizon threw long, dark shadows from hillock to hillock. The igloos and food caches became silhouettes along the skyline. The yellow rim slid westward on the horizon, rising until it appeared like the upper half of an orange playing hide-and-seek with us. It gradually withdrew. We were not permitted to see it entirely that day.

The next day the sun rose so that we saw its ball of fire crossing the southern sky, casting long, blue shadows in an endless pattern over the snowscape. It would be days before we accustomed ourselves to this and we never tired of looking. Often we glanced in the direction of the sun, just to be certain it was still there. There were six hours of sunlight just twenty days after it reappeared.

With the coming of spring, the air and the snow-covered tundra were filled with birds and flocks of ducks. The snow began to melt. Soon the tundra began to appear and the sun beat on the windows of our bedroom, making it unseasonably warm. We almost suffered from the heat, until we covered the windows to keep the sunlight from them; then we were comfortable again.

The sun also provided warmth in a way we did not anticipate. I have mentioned how we thawed the hard tundra at the back of the house so that we could build wooden walls for our furnace room. One day we found several feet of water and mud filling the room and noticed that the walls were being crushed in by mud and water. It took no second glance to understand that the sun had teamed up with the furnace and had melted the surrounding ice. This was something of an emergency so we dipped the muddy water from the space surrounding the boiler room. To save our furnace room we needed to insulate the walls. The problem was solved when we took empty oil drums, 50-gallon size, placing them all the way around the wooden-walled room, packing them in tight with dry tundra, after first restoring the walls to their accustomed place and making them fast.

Everyone felt better now that the sun was back. During the winter everyone was quarrelsome, and the school children were restless. Now all became cheerful and friendly, thankful all were alive to welcome back the sun. The babies had become pale, with colorless, ofttimes blackened cheeks. Now we saw them pink and rosy.

Throughout March the sun shone brightly but temperatures remained near 50° below. On one such cold day our dog had pups. We first knew something unusual was happening when we saw a large group of school children gathered about her doghouse. One child came to call us, because one pup was stiff and apparently dead. The native children said it would live if warmed, so we placed it beside the stove. At last it began to whine, then moved about in search of food. We marveled, for to all appearances the pup had been frozen stiff.

Early the previous fall we had been given seven pups, some Greenland dogs and some Kotzebue strain, and we had enjoyed seeing them grow. They were great pets but their care increased as they matured. At six months they were tied with chains attached to a longer chain at intervals to avoid entanglement. Every evening each dog received a piece of reindeer meat. Later I fed them walrus, for it had more food value than deer meat.

Tommy Brower had an exciting experience that spring. While hunting one day he stepped from the snow covering the land to that drifted over the beach; the crusted snow gave way and he fell into a small cavern that turned out to be a polar bear's den. Looking up, he saw the mother bear and fired his rifle down beside his feet to frighten her; otherwise she would have fallen on him. He then jumped out and ran as fast as he could. When 60 or so yards away he paused, then he carefully returned, and threw a stick into the mouth of the cave. The mother bear grabbed it to her breast with both forepaws. Tommy fired at that instant and his bullet hit her squarely. Though he feared there might be another old bear in the cavern, he went in and brought out the cubs. Those cubs were sent to San Francisco's Golden Gate Park, where they grew to be large animals.

The natives became restless. They wanted to hunt. "We are hungry for seal blubber," they said. A strong east wind or strong ocean current from the east would open a lead offshore; the natives would sit beside the lead watching for the seals which crawl up on the ice. I saw the men and some of the older girls out on the white ice on their way to the hunt.

As the sun began to make itself felt on the ice pack, we could see a black water cloud hanging over the ocean. This signified open water and the natives were out every day on the icy surface with their sleds and kayaks to hunt seals. They got quite a number, for they offered some for sale at five dollars each for dog feed. They brought us many seal livers as gifts and we gave them sugar, flour or other foods in return, for the fresh meat was very welcome to us.

The second dog mail arrived. One could hardly imagine the tension as everyone waited for the overdue mail. We saw the sled as it crossed the lagoon to the post office, several children running alongside. The nurse and the cook hurried to the post office, but we remained at home. Soon a native boy arrived with a sack weighing 60 or 70 pounds.

We read the official mail first, Akiak next. Willie Kesuylie's claims had not proven good; another bubble burst. Noah Jackson thought his better, and so we still hoped. Noah and several other natives had petitioned Juneau to have us return to the Kuskokwim, and this made us feel good.

We had a letter saying we would be transferred and a wire stating our transfer would be by the *North Star*. As yet we did not know where. We sent our yearly grocery order, but requested them to await a wire giving our next year's address.

One of two polar bear cubs sent from Barrow to the San Francisco zoo.

Whale

"Whale! Whale!"

Three small boys were running as fast as their little legs could carry them through the village. As they ran, the village folk emerged from their houses and we saw them hastily harnessing dogs and readying sleds. The lookout in the crow's-nest on the mast behind the school had seen a black spot far out on the ice. He trained powerful ship's glasses on it, and saw it was a whaling flag, the signal to the village a whale had been taken. So far that year only two whales, both dead for some time, had been found. These dead whales, called "stinkers," were fit only for dog food.

Virginia, who was getting breakfast, called that a man was at the door. He wished to know if I cared to go with him to see the whale. I hurriedly got ready. He had nine dogs hitched to a heavy sled, the kind used for heavy hauling. We headed out over the first ice wall, then threaded through the crushed ice of the Arctic Ocean. Soon the seascape took on a green and blue color, losing the gray and dirt of the ice near the coast. The pressure ridges were higher and the going was difficult. The low black water cloud grew in size and became darker as we approached the open lead. The ice was rent by cracks through which the dark water lapped. Fissures three feet or less were crossed easily, but one much wider caused some trouble. To either side was much open water, so the driver put the long sled across the fissure to bridge it. We then ran across on the sled and dragged it after us. Later, one of the dogs dropped to the end of his harness. With our aid the dog scrambled hurriedly out.

We eventually saw with unaided eyes the whaling flag, a tiny speck on the horizon that marked the whale's location. An hour later we arrived at the open water—our destination. Already many men and boys were swarming about and hundreds of dogs and dozens of sleds lay on the ice. Our tired dogs lay down, too. Our driver sank the sled's anchor in the snow and turned the sled on its side, a precaution against the dogs moving, and then we crossed the last hundred yards on foot.

The skin boats used for whaling were drawn up on the ice. They were light and each carried a crew of six to ten men. On the bow of each lay a harpoon, with a point carrying a bomb. The handle was like that of the peavey used by loggers. The whale gun, made of brass and measuring about two-and-one-half feet, resembled an ancient museum piece. From the end protruded another whale bomb. The whale was at the edge of the ice and looked much like a huge black rubber ball. A skin boat was alongside. Ropes anchored the huge carcass to the ice and floats of seal pokes were fastened as buoys. The ropes were anchored in the ice much as airplanes were tied. Parallel trenches had been chopped, a foot of ice separating them. A foot down into the ice a tunnel connected the two and ropes passed through this served as anchors. Between this and the whale were blocks and tackle.

From boat and shore the men worked. To the ends of long poles broad chisels were attached (these were used to detach larger chunks from the carcass), and a whale flipper, first firmly attached to the shoreline, was soon separated from the whale. Many men pulled on the ropes to the blocks and they sang an old sea chanty as they heaved. The dismembered portion slid on the ice and immediately it was cut into blocks of about one hundred pounds. The whole village came—men, women and children—and all worked with feverish haste.

The spotted whale was about 45 feet long, an average size. The black skin had long white lines along the sides like old healed scars. The tongue was about ten feet long, five wide and four thick. Two blocks were used to haul it in and 60 or so men pulled on the lines.

The women set up small, triangular, canvas shelters and began cooking. The stoves were made of five-gallon gas cans with a half-circle cut low on one side. Whale blubber was used as fuel. They mixed bread in the flour sacks the way western cattlemen and shepherds mix sourdough.

Thousands of eider ducks were flying northward over the open water, while fish hawks and gulls sailed overhead. I busied myself making sketches and taking photographs. After a time the wind began to blow and it grew chilly. My feet were cold and I was decidedly uncomfortable. I glanced at my watch and was surprised to find it was midafternoon, so I decided to set out for the village and home.

Later I learned I had missed out on some fun. While the whale was being raised from the water a polar bear came along. The bear was making directly for three men who sat as lookouts scanning the ocean for whales. The men did not see the bear, and a boy ran toward them pointing until they turned and saw it. The boy had not shouted a warning for fear of frightening the bear, which they proceeded to shoot, hitting him in the hindquarters; then, as he reared up on his hind legs, they gave him six more shots in the chest before he dropped.

Early the next morning, thinking it likely other bears might visit that locality, I got into my parka, placed a packsack with emergency rations on my back and, with my 30-30 Winchester carbine, retraced the previous day's trail. I had to sound the ice in several places using the butt of my rifle. The wind blew hard. The ocean loomed blacker even than the heavy water cloud; the ice crush, higher; the seams, bigger; the surface of the old ice, more uneven, as if under great pressure, and I began to feel uneasy. The bigness and emptiness gave me a sensation of loneliness and fear. I did not mind floating on an ice floe if there was a boat on it.

Cautiously, I crossed the last 200 yards of ice, which the day before had been covered with dogs and sleds, and came to the smooth place where the whale had been dismembered. Piles of meat, bones and red ice were everywhere. Then I saw tents. In front of each was a skin boat in readiness for immediate launching, and men watching the open water for whales. Inside one of the tents were two men preparing a meal of coffee and meat, while three or four slept loudly on a pile of skins at the rear.

They told me there was a polar bear at the farthest tent and I started for it. They told me to walk along the edge of the ice as it was dangerous farther back, and added that the ice might open at any time and that it could easily open behind me, especially with the high wind and the ocean current. While I felt safe with them, I did not feel that I should like to stay on the floe and take unnecessary chances or handicap the natives by having them watch out for me. There were only several miles between me and the village, so I retraced my steps.

Only once did I step through unexpectedly. At suspicious-looking places I sounded the ice, but this time the trail appeared safely covered with snow. When my foot went through, I threw myself forward, keeping my arms outspread; only one leg went down. Eventually I reached the village safely.

One morning not long after, the village was unusually quiet. There could be but one explanation; another whale had been killed. It happened during the night about 15 miles from the village. I knew I could not go alone, and Lee, our janitor, told me Bartlett, his brother, would take me.

We went down the coast and soon fell in with several more teams. At the place where Post and Rogers crashed there was a stone monument and, seeing it, we turned about, realizing we had missed the trail. We returned eight miles till we found the dog trail leading toward the water cloud. The ice was so rough now that it was almost impossible to ride our sled, and we walked. We had started about ten in the morning and it was five in the afternoon before we reached open water and the whale. I had been perspiring, but the weather was decidedly cold, and when I stopped I soon began to shiver. A bucket was boiling over a rude stove; "muck tuck" was being cooked.

Muck tuck is a delicacy to the Eskimo. It is whale skin with some of the blubber attached, resembling a strip of rubber almost an inch in thickness, with creamy white fat. Cut in thin slices, it is boiled for about 45 minutes. Natives were careful to eat sparingly of this, for it caused them to vomit if too much was taken at one time. I was cold and hungry so I ate several pieces as I realized I must have sufficient nourishment to get warm and for strength to get back to the village again.

After taking a few pictures, I drank a cup of coffee and was ready to start back. My driver wanted to go with me, but I insisted that he stay. Otherwise, I feared, he would not get a share in the whale, since custom dictated that every ablebodied person must help in order to receive a share.

At seven I left the whaling camp. Bill, Mike's 14-year-old son, followed. For three hours we walked. The trail at first was easily followed. But then the sky grew dark, fog clouds closed in, and a fine snow pounded our faces and swirled about in the strong wind. I found that walking over the rough, slippery surface had made me extremely tired, but I said nothing. We had passed the worst ice, but the trail was deep with soft, loose snow into which my legs sank sometimes more than two feet. I realized it would take everything I had to make the village. For more than two hours we had seen a dog team following a long way behind us. Now it came up to us and I recognized the driver as Bartlett. He insisted that I ride. I tried to persuade him to go back and earn his share of the whale, but he was "afraid I would become tired." I felt embarrassed. I had always been as much at home in the open as anyone; however, I was tired, so when Bartlett assured me he must return to the village for another sled anyway and that he would still receive a share of the whale I was only too glad to ride. It was midnight when we reached the village. Bartlett wanted no pay, but I made him a present of my 22 rifle.

During this period, three families sent us muck tuck. This was about the most sincere sign of affection an Eskimo could show. It was never too plentiful and sold for a dollar a pound, when it was to be had at all.

Days passed. The weather grew mild and pleasant. The whaling season was almost over, but before it finished the natives found another "stinker." I was at a loss to know how they located a dead whale under the ice. One could not see through the snow and many feet of solid ice. The natives explained they smelled for them; and dogs were also used to detect the odor.

The whaling season over, preparations were being made for "Nullakatuk"—the custom of thanking the gods for success in the hunt. The celebration was announced by mounting a whaleboat, with its flag waving from the masthead, on a barrel and then on the sled used to haul the boat over the ice. The knife used in cutting up the whale, the harpoon and spear were all displayed. The spear had a piece of fresh whale skin tied to wave in the wind from its point.

The women had prepared for Nullakatuk for months. They had made clothing while the men were on the ice, snow shirts with elaborate embroidery for the eligible boys and girls, as well as boots and mukluks for the girls. Each girl had chewed and pleated the ugruk soles of her boots with her teeth so that all could see how beautifully she worked. Everyone looked their best during the festivities.

The first Nullakatuk was to be celebrated on the station side, this crew having announced the celebration first because they had obtained the first whale of the season. Two flags were flying from masts erected on the sandy beach with colorful pennants strung between. A canvas and skin windbreak had been erected in a semicircle, in front of which was stretched a walrus skin about twelve feet square, four or five feet above the sand, ropes rigged over supports far back from the skin. Early in the morning the children crowded around the skin and a scramble ensued. The first to get into the center of the skin was permitted to stand on it. The others must all get off. Then all surrounded the skin and started swinging it rhythmically, chanting an Eskimo "One, two, three and yen!" With each count the skin was lifted and at the fourth the jumper was sent high into the air. The higher the better, and the one who had the best sense of balance received the most applause. When the jumper failed to light on his or her feet, another boy or girl took the place. Some made fancy, graceful gestures, kicked, spun an inflated seal poke underfoot, or somersaulted at the height of the jump. As the day went on, the older and more expert men and women performed. Some were thrown 20 feet into the air. Some fell off the blanket. Our nurse was the first casualty and suffered an injured knee.

Toward night, or rather as the sun turned to the north, the throb of ancient Eskimo drums was heard. I compared these to those heard in movie productions of African music, which they resembled closely; while weird, they were nonetheless musical. From our house a mile away I listened and was thrilled and, though Virginia was ill, I could not resist the temptation to steal away to hear and see better.

There were seven drums, all in a row, all alike, held in the left hand and struck with a little switch on the backside, not on the drum head. There was a sudden pause in the music; then after a minute one man, probably the crew leader of the boat, began to hum. No words, just "High-ee-ho," and one by one the others took up the rhythm. Finally, the drums joined in beating time.

Two days later Nullakatuk was celebrated on our own beach. It was almost noon before the village stirred. The fog rolled in from the Arctic, chilling and drenching all outdoors. The whaling flags were up and a canvas windbreak formed the remainder of the amphitheater. Apparently each crew had its own skin as this one was different from the one used the day before. It was seven or eight o'clock in the evening before the grownups began to jump. The children had been jumping all afternoon. One jumper missed the skin and broke the foot of a young woman as he landed. Another broke an arm. But the jumping continued uninterrupted and more hilariously. Even old Su Suk, my ancient and angular Man Friday, was tossed some 15 feet into the air. At eight or nine I inquired when the dancing would begin and was told that it could not start until all had been fed.

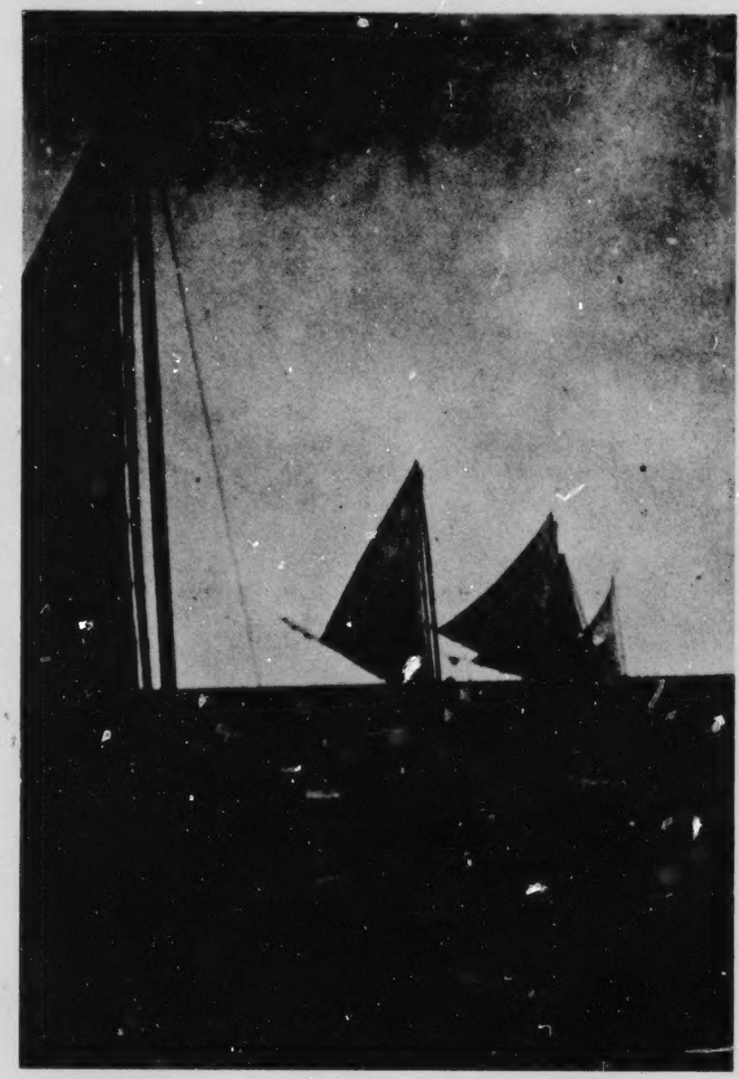
Nullakatuk was a ritual thanksgiving celebration. There is a side to the Eskimo which we did not understand. This we called his savagery or religion of his ancestors, as yet not altogether forgotten by the present generation. Although the mission had fought determinedly to abolish this "heathenry," ancient folk songs and dances were included in this ritual.

That evening the whaling crew was in the role of "servants" or hosts to the remainder of the village. They and their families opened their food cellars and waited on the others, apologizing for their poor food, their poor manners and hospitality, and all the time bringing more tasty and tempting foods. I sat sketching the faces about me. One old woman held a long-stemmed pipe of ancient Russian design. A collector could not have resisted it. He would have offered to trade $50 worth of calico for that pipe. An old man at my side belched repeatedly, loud and long, sounding like a bloated cow, just by way of courtesy. This was the ancient Eskimo way of showing appreciation for a bounteous meal. Then I heard a rising note of voices, starting low, then ever louder, until I turned to see what it might be. Many men were pulling at a long rope. There followed a long sled piled high with orange and black whale meat, behind which were many men and children pushing; a mighty display of the host bringing more and more food. This meat was passed around to the entire crowd. Then came the women with rolls, tea and coffee. I was served and ate the roll and drank the coffee, though they seemed surprised at my accepting. I passed up the frozen muck tuck. Still sled after sled loaded with meat was brought in. I could not see how they could hold so much. I saw little children lying on the ground, looking for all the world as if they were intoxicated. I recalled how the little girl whose fractured arm I had set was asleep within a few minutes after being placed in a hospital bed, showing how exhausted she must have been.

At one in the morning I returned home for heavier clothing, resolved to see the dancing if I must stay all night. The missionaries left when I did. I dressed in parka and mukluks and returned. The skin was being torn down, the drums were being brought, and within a few minutes the songs were being rehearsed. Apparently the missionaries had disapproved, and so the dance could not begin until they left. The walrus skin was placed before the semicircle on the sand, much like a stage, and the dance began. I believe it followed ancient rites far more closely than they were willing for a stranger to know. First the host danced, then his crew and their families; next, the other whaling crews and, last, those not included in the first groups. The motions were comical to watch and created much laughter among the spectators. Sometimes as many as a dozen danced at one time. It was not until 8:00 a.m., when the fog turned to rain, that the drums ceased to throb and

Nullakatuk was over for another year. They told me that in ancient days this ritual often lasted for 14 days.

It was snowing that morning, the last day of June 1937. Hardly a person stirred in the village the entire day.



A line of Barrow whaling boats asail on the Arctic.

Arctic Exploration

Point Barrow was a name that commanded attention. To every American it meant Alaska and more, the "top of the world," a far-off place in the Arctic ice, uninhabited except by a strange race of snowdwellers called "Eskimos" and occasionally visited by adventurers or explorers enroute to the North Pole. It was natural it commanded attention and that any news originating at Point Barrow was of interest to the rest of the world.

There was keen rivalry between the news services for stories from Barrow. Anything which provided newspaper copy was reported. It seemed that any incident reported was read with interest by the public. There had been a story of a heat wave at Barrow, another about a golf course on the snow, with golf balls painted red so players could see them. Every winter there were reports of epidemics.

One day I found Charlie Brower sitting in his store chuckling. He told how two news correspondents had asked for a story and had gone happily away to send out the news that he was to quit. "Charlie Brower to Retire," the papers would say. Just where would he retire to and what would he do? But it was a good joke and made copy.

Still chuckling, he told of still another, even more amusing, incident of this Far North, the Kotzebue Gold Rush—Kotzebue, where there had never been a gold discovery. A shipping man spread a story in Seattle of large pieces of gold coming up with the anchor of a boat that had sat offshore from Kotzebue, and incredible tales of natives picking up nuggets from crevices with tongs. To Alaskans this news drew only a laugh, for Kotzebue Bay is a shallow, mud-filled waterway where ships must anchor far offshore and only small boats cross the mud flats from shore to deep water. But to the imaginative cheechacker in the States it meant an opportunity to gather a fortune, and if the shipping men had been experiencing a lull in their business, it suddenly ended. There was a rush of prospectors, equipped with long-handled tongs, rakes and sacks for nuggets. Kotzebue enjoyed prosperity all that summer, but winter was very unkind to the cheechackers who stayed behind. Those who returned to the States were a saddened, disillusioned lot.

Word came on August 27, 1937, that a Russian plane was flying, nonstop, over the North Pole to the United States (from Moscow to New York) but that the four-motored craft was presumed lost. Missing were its crew of five and the war hero, Sigismund Levanevsky, one of Russia's most popular men—he was known as the Russian Lindbergh. Almost immediately a search was begun for the missing men, with Russia, the United States and Canada united in one big, international effort.

Forgotten entirely were all disagreements with Russia. Rumors began to fly fast in our sleepy little village and we did not have long to wait to be involved in the activities of the search. An odd-looking seaplane arrived that afternoon, landed on the lagoon and moored beside our radio station. Someone launched a small boat and brought the crew ashore, where the operator welcomed the Russians. There was much laughter and handshaking, though none of us understood a word of Russian and they did not speak English. Once ashore, the Russians went directly to the radio room and took over the key and began transmitting code.

Later that afternoon the natives sighted two black funnels belonging to the Russian icebreaker *Krassen*, which was on its way from Cape Schmidt (North Cape) with three planes aboard. Next came a small Fairchild plane bearing two Canadians* from Aklavik, a Canadian village on the Arctic coast. A plane flown by Jimmie Mattern,** with a radio operator named Stump and "Hank" Jones, said to be a wealthy Texas oil man, arrived.

The Russians were given freedom to fly wherever they wished. Mr. Swensky established himself in Fairbanks as coordinator and dispatcher. He interviewed many persons concerning Alaskan geography, and all possible help and information was given him.

There was some question whether Levanevsky ever made the flight. He was a hero to the Russian people, and it was thought that the custom, just then, was to liquidate anyone who became too popular. Even some of the Russians thought it likely Levanevsky had been liquidated and that the big search was an attempt to cover up, giving him a hero's death,

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*One was probably Bob Randall.

**James Mattern had made plans for his own polar flight in late June 1937, after the first successful flight by Chekaloff, Baibukoff and Beliakoff from U.S.S.R. to Vancouver, Washington, early that month.

and at the same time giving the Russians a chance to obtain more knowledge about Alaska.

Several Russians were quartered at the radio station, and one morning I took a message to the radio room. I noticed that behind the desk stood the tall Russian Auston, pencil in hand, busily copying charts from the wall. On the desk before him was a radio set, open and partly dismantled. Our operator was not present. The Russians had wireless equipment on their planes and their ship was but ten miles out, but they used our radio transmitter to send messages to Fairbanks and to their homeland. We helped them in many ways, such as using our tractor to haul their supplies.

Sailors from the *Krassen* came ashore and explored the village. Russian planes flew over the ice and the land but seemed never to get far from the village. The natives said they often saw them back on the tundra; that they sat their plane down on a lake where they would remain a few hours, then return to the village. Their smaller plane cracked up when the crew tied it to an ice pan and went aboard the *Krassen* for a meal. The crew was later punished—liquidated was the rumor.

The *Krassen* anchored just outside the ice ridge which still held many grounded bergs. The natives feared the Russians, but the white populace enjoyed visiting the ship. Both women and men were on the crew of the *Krassen*. The ship also carried a few hogs and cows. The *Krassen* was egg-shaped, displaced 11,220 tons, burned 150 tons of coal daily when in ice, and was fired by hand. She operated ten boilers which were located on the ship's decks. Opinions differed: some said the ship was dirty, others that she was orderly. The Russian ship had oil and gasoline to be unloaded at Barrow for the use of the airplanes. These supplies were put ashore, then the ship put out to sea. She appeared to be fast in the ice for a day or two. Occasionally a heavy cloud of smoke rolled up from her funnels. Soon she disappeared from view, but for several weeks we occasionally saw her working back and forth through the heavy sea ice near Barrow or to the coast on either side.

Our fliers, for the most part, sat around the radio station. Very seldom did one take to the air. Harold Gillam, an Alaska-born pilot, came from Fairbanks. He brought a radio operator to assist the one in residence, who had been handling a great many messages and newspaper copy. We heard that Sir Hubert Wilkins was to come for the winter. Alfred recalled that Wilkins was once forced down more than a hundred miles from shore, and that he made it to land over the sea ice. Alfred thought Wilkins and Steffansson could get along better in the North than could the Eskimo.

Wilkins would arrive at noon, we were informed. His silvery plane, a Lockheed Electra, came in high and circled the village, losing altitude. I saw big red letters "USSR" on the plane's wings and body. There were four men in the plane—Sir Hubert, Cheesman, Kenyon and Dynes—and they all came for dinner that night. All were interesting men. Sir Hubert was dedicated to exploring. Just then he was donating his time to the Russians, but expected a new submarine as payment for his part in the search. He had a desire to try exploring by submarine beneath the Arctic ice pack, he said. Both Sir Hubert and his pilot, Kenyon, told of their experiences, comparing the North and South polar areas.

Mr. Kenyon was a large and very likable person. He wore a white snow shirt over his fur parka, which made him look huge, and the Eskimos called him "Beluga," or white whale. He had flown over both the North and South poles, though he was very modest and did not often discuss his exploits. He had fought as an infantryman in the trenches throughout the First World War. Later he took up flying.

Sir Hubert's party lived in one of Brower's cabins and Mrs. Brower prepared fur clothing for them. One morning as I looked from my window I saw what appeared to be a small building on the beach, halfway to Brower's station. I just could not believe my eyes at first and thought it some trick the twilight was playing on me—certainly there had been no building there the day before. I investigated and recognized the radio operator's doghouse. Sir Hubert was building a radio station. After getting the house in place beside the ice ridge, they raised a four-posted tower, resembling a windmill tower, to a height of nearly 50 feet, and when this was done they cut and carried snow blocks and piled them along the sides until it was entirely surrounded. It made a good subject for photography, but we never knew them to use it. Their news dispatches continued to go out by routine channels.

Meanwhile, the search for the Russian plane and fliers seemed to lag. The Canadian plane returned to Aklavik. Rumor had it two Russian ships would be based at Barrow that winter.

Pilot Gillam had been engaged to fly between Fairbanks and Barrow for the Russian government. In all, he made eight trips during the winter. Once he landed at Cape Halkett and the report came he had wrecked his plane somewhere on the Arctic coast. Minutes later, Sir Hubert readied his plane and flew eastward to search but after ten or fifteen minutes returned, having run into fog. Schmieroff, a Russian, had spent much time the previous week repairing an old Ford with tractor tread and ski for just such an event. Accompanied by another villager and a guide, he now went to the rescue.

That night we listened to the news broadcast telling of the rescue: how the searchers faced a raging blizzard while traveling over the ice pack, how their snowmobile broke down and they were forced to walk the remainder of the way to Barrow, and how one man's face was frozen. One bit of news the broadcaster did not know was that an Eskimo drove a dog team behind the snowmobile just in case it should break down and they needed transportation. It did break down, on the lagoon a few hundred yards from the radio station. Gillam, however, was able to fly into Barrow. Two Eskimo men—Alfred, from our village, and one from Cape Halkett—had repaired a broken tip of one of the plane's wings, making it possible for him to fly. Upon inspecting the damaged wing I found it difficult to find the patch, they had done such a beautiful repair job.

At this time the Russians, who had come to search for their missing airmen, were still with us, though only one group of men remained and these stayed in the home of the Alaska communications operator. Schmieroff, who interested me more than the others, was in charge of the party. He was greatly worried, for the wife he had left at home got word to him that unless he returned soon she would divorce him. At last word came for him to return and a plane was to come from Fairbanks for him. The day started out beautifully but became overcast, and fog came in from the ocean. No word of the plane was received other than that it had left Fairbanks early that morning. In the afternoon the voice of the pilot came over the short-wave radio. He was "down on a river, the Meade or the Chipp; there are willows about a foot high, a high bank in the distance. The river runs straight where I am but just above it is very crooked. I have sufficient gasoline to get into the air for a look around." Here he went off the air.

Schmieroff was for searching for the downed plane, using his snowmobile, and there was talk of a search from Fairbanks. The natives had seen the plane but 35 miles from Barrow, over the Meade River, and thought it strange this experienced pilot would get lost when so near Barrow.

On the fourth day we learned that one man with a dog team had been dispatched to find the pilot. The natives worried about this, as they feared that a storm was coming, and next morning two villagers, Alfred and Howard, prepared to go looking for the downed pilot, saying that his life was in danger. And, too, they felt Barrow owed something to anyone in distress and they would not stand idly by when they might be of aid. There were others who wished to go. All had provisions for their dogs and I gave them food for themselves. The sleds carried primus stoves and a few extra gallons of gasoline, in case the plane needed fuel.

Next day, just at noon, we heard the motor of a plane and minutes later the pilot and his mechanic alighted. They had a week's growth of beard but otherwise were none the worse for wear. I inquired how many dog teams reached them.

"Eleven," was the answer. "They came in just as if they knew my position." He seemed amazed, and not especially pleased, at the ease with which they found him.

The natives later told of finding the plane, which landed on the river ice. A drift was forming that would soon have engulfed the plane. They all worked for several hours shoveling snow; then they pushed the plane so it could take off. They transferred much of the plane's load to the sleds, for the runway was very rough.

The natives received no pay for their trouble; nor did they expect any, feeling that it was their duty to aid anyone so distressed. One of the men was of the opinion they spoiled an otherwise good publicity stunt.

I was writing a few letters for the pilot to take, when I heard shouts and the firing of rifles; someone came running to tell us the ice was cracking near shore and that many hunters were far out on the ice. Villagers ran to the water's edge; some perched on the lookout mast, some on the hills and on the housetops. They kept firing rifles and yelling in an attempt to warn the hunters far out of their danger. Then little black dots began to move on the ice. The hunters were running. The wind and current were offshore and only a short way out a black line of open water appeared and as it widened there rose above it the ever-present curtain of vapor, the water cloud.

I walked to the water's edge, and saw three men running with a kayak; then five hunters arrived at the opposite shore.

Many hands lifted a skin boat and carried it out and launched it, and the five men were brought over the lead. Several more crossed in the kayak and some got onto cakes of ice and were towed by means of a rope across the open water. All the hunters eventually reached home safely.

That night we tuned in an Alaskan broadcasting station for the news and heard an exciting account of the natives afloat on the drifting ice in the Arctic Ocean, but most surprising was the account of their rescue by a visiting airman who flew his plane out to them and brought them safely home!

The Russians eventually left Barrow. They walked out to the plane in the dim light of one early morning. Their plane, fitted with wheels for land flying, was kept back of the village. Shortly, they came running back to the operator's house yelling for guns; saying four wolves had chased them. The natives were skeptical.

"Dogs look pretty big in the fog," was the natives' explanation.

As the Russians left, one of the village ladies waved a red flag in farewell. Schmieroff was sad at being left behind as this meant he could not return to Russia by November, the deadline set by his wife.

Sir Hubert planned to fly to the North Pole and scheduled his flight when the full moon would rise above the horizon and circle it for the entire 24-hour period. He made the attempt but was unsuccessful, ending his flight at Aklavik.

The summer had gone and, except for our Schmieroff, so had Barrow's visitors. Now we could settle down for the winter. The Russian aviators had not been found.

Summer Visitors

Barrow received four mail deliveries each year. The three by dog team allowed 200 pounds of mail for the village. The fourth delivery, by Castell's little boat, brought all the second and third class mail that accumulated during the year.

Soon after Mr. Castell's departure in the *Nanuk* ("Polar Bear") came the four-masted sailing ship, *Holmes*. She came past Wainwright, following an open lead, until the wind left her becalmed alongside the *Krassen*, the Russian icebreaker. The natives sighted her and brought the news to Barrow where traders from the east awaited her. I rode out in an umiak with 30 natives and we were among the first on board. For the 400 pounds of our freight aboard we were charged $70, which we thought quite a lot. We were still cheechackers to them, we decided.

The next ship to arrive at Barrow was Ira Rank's. I was walking along the beach at the end of the village when I saw it pinned in a lead about a mile away. As I looked I saw a white man and many natives approaching over the ice. The white man was Mr. Rank, the captain, an unusually rugged and weathered person. He was dressed in rough canvas clothing that hid all except his face. He had goods for trading posts east of Barrow and would sell nothing at Barrow, which disappointed us as we needed food badly. We had received inquiries from Washington, D.C., about a famine among the natives to the east, caused by a scarcity of ammunition, and I told him of the situation. This provoked a snort of disgust.

"Those fellows now sit and refuse to take fish in front of their door," he stated. "They say they are going to live on relief; they aren't going to hunt or fish anymore. Then in winter these fellows—they are mostly young bucks—will move in and eat up everything the older ones have put up, and then they move on. That is why they now have hard times."

We were surprised when Rank anchored his ship in front of Brower's trading post and opened up his stores and bartered with the natives for two days before continuing eastward.

The *Northland*, our icebreaker, had been lying off Wainwright for several days while the Russian icebreaker *Krassen* wandered back and forth east and west of Barrow. We were anxious for the *Northland* to come, for she carried a dentist;

there was no dentist for the entire length of the Arctic coast. The weather turned bad and we feared the *Northland* would pass up Barrow that year, but then she appeared, a beautiful ship that glistened white even among the ice floes. The first boat from the cutter carried several strangers ashore: Senator Robert R. Reynolds from North Carolina, Dr. Townsend from the University of Washington, Lieutenant Urhand of the U.S. Army, and Mr. McGinty, a building foreman. The latter two planned to stay and investigate conditions at Barrow.

The *Northland*'s captain was anxious to leave Barrow as soon as possible for he was afraid of the ice. I could not blame him, as he was responsible for the safety of his ship, which was worth more than a million dollars. Though she was built as an icebreaker, the *Northland* had on one occasion disgraced herself by getting icebound in the Columbia River in only two inches of ice. Consequently the captain was not willing to take chances in the Arctic Ocean.

Our supply boat, the *Patterson*, was also enroute to Barrow and we anxiously awaited news of her. One evening a wire announced that her captain was ill and that they would try to make our village by morning. The *Patterson* arrived at daylight and I was on the beach to meet the small boat put ashore. I was immediately taken on board, where I found the captain had suffered a cerebral hemorrhage. Mr. Haney, the officer in charge, wanted me to take the captain ashore, but we thought it best to send him to Nome for hospitalization.

The ice pack drew near and the *Patterson* was moved into the shelter of the Point. There the crew began piling the Barrow goods on the beach. The day following, the skies and ocean cleared and the ship was moved back to our village and lightering was continued. Many of the goods and supplies were damaged. Sugar sacks were soaked in oil that had liquified the contents, so that each sack appeared to be about one-third full. The natives carried the sacks, dripping oil and water, over their shoulders from the boats to the beach, presenting the most sordid picture imaginable; oily syrup dripped from their clothing, hands and feet. We could not imagine using the sugar remaining, regardless of how short the stores were of that commodity.

A few days later a small boat, the *Pandora*, arrived from Nome. It was 35 feet long and its crew included five ministers. Their mission was to erect a monument to Will Rogers. They were financing their trip by selling a commemorative cachet, charging 25 cents for each envelope.

Enroute to Barrow the ministers had come on a herd of walrus sleeping on an ice floe. The men approached the herd as quietly as possible, fired at the animals, then hurried to an old walrus lying in a fissure. Thinking that the animal was dead, one of the ministers struck the walrus with a butcher knife. Apparently the old fellow had slept through all the noise. He awoke, reared up higher than the man and emitted a terrible roar. The nearest man jumped a mighty distance and all ran, with the walrus in pursuit. Finally one of the men shot the old fellow dead. They resolved to say nothing of their adventure with the walrus, for they had no Alaska hunting license and supposed they had broken the law. However, they confided in the Barrow minister, who explained that no license was needed for hunting on the ocean. He laughed heartily at their account and thought the story too good to keep.

The *Pandora* was but a speck on the horizon when a large skin boat came skimming over the water carrying Father Hubbard, called the "Glacier Priest" for his explorations of and writings about Alaska. He was accompanied by his two assistants and a crew of six King Island natives. They made camp on the beach under their boat, which they turned on one side to make a shelter. The visitors paid us a call. When first I glimpsed them I took them to be miners because of their weathered features and rough clothing. Although Father Hubbard stood nearly six feet without shoes, he was dwarfed by his assistants, good-natured, blond Ken Chisholm and redheaded Ed Levin. They spent the day visiting and photographing the village. The last we saw of them they were headed westward, the little skin boat again gracefully skimming the water until they disappeared into the distance.

Father Hubbard's party included a very interesting man, the chief of the King Islanders. He was striking in that he was an unusually large man, and his forehead and entire body were mottled with patches of blue spots. Never had I seen this marking so prevalent or vivid.

Ghost Ship *Baychimo*

Here is the story of the ghost ship *Baychimo* as written in a letter to me by a native, Rex Ahvakana:

"In the year of 1931, unaware of her coming fate,* the steamship *Baychimo*, moored half a mile offshore of Barrow, a magnificent sight on the barren Arctic Ocean. There were little ice floes here and there which could be seen slowly making their way shoreward, but they were little problem to a ship as large as the *Baychimo*, with 800 horsepower behind her, and the ship was made of steel sheets. It was a very calm and warm day when, after a few hours stop, she headed eastward.

"About a month later she came on her homeward run, never to reach her destination. She went down as far as Atanik, then she was caught in the ice near there. The captain tried to free her, but the Arctic was more powerful than the *Baychimo*. Captain Cornwall decided to spend the winter there. They made a house about seven miles this side of Atanik. All but a few sailors and Captain Cornwall were flown out in airplanes. For some reason they did not take the 15 bales of foxskins. No one saw the *Baychimo* until November when Joe Sigvaovongak and Andy Ungarook, who were trapping along the coast, saw her being carried by the current with ice all around her. A few days later Mr. Morris and his driver Katoak came to Joe's trapping site searching for the abandoned ship, which was not more than 20 miles straight out. After their meal, they planned how they would remove all 15 bales of foxskins, each weighing 100 pounds, without realizing the difficulty of travel in total darkness through distorted and constantly moving ice. However, they were not long in realizing their goal.

"Early the next morning they started out again with the help of Joe and Andy. It took $100 a day and much persuasion to induce the two boys to go along. They got fourteen bales off the ship but had to discard four of them along the way. When they reached camp, Mr. Morris gave Joe and Andy a bonus of $100 each and promised the same amount provided they got the remaining sacks. For some reason, Joe could not go and Meldon Moomigana took his place.

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*The *Baychimo* would eventually be caught in the ice near the Seahorse Islands.

"Sometime in February of the same winter the old derelict showed up again due northwest of Barrow. It was approximately 30 miles out this time. The famous Clair Okpeaha walked all that distance and evidently he got a few things off the ship. After this the abandoned ship faded out of sight for the third time that winter.

"One afternoon just as we felt that the monotony was getting on our nerves, since there was no hunting, we were startled by the cries, 'ship, ship, ship!' But what ship could be so powerful as to travel through the heavy ice pack? As we watched, the ship came closer, but we could not identify her. Finally we saw that it was the old *Baychimo*.

"We were very excited for we were thinking of a little box of radium ore left on the ship. If it had not been removed while they were flying the sailors home, it would be a valuable prize for us. We were not long in deciding to go out to her. Twenty-one of us started in two skin boats. One was powered with an outboard motor. In our haste we did not take much food, only a case of pilot bread and a little meat.

"We struck the solid ice half a mile out. We pulled the boats up on the ice and lashed them to our sleds and started pulling the boats after us. Rough as it was, we made fair progress. Sometimes we came to places where the ice was crushing; crossing then was difficult and dangerous, but we had two experienced Arctic trotters, Max Egashak and Michael Keogak. They showed they had earned their title for they knew the movements of the ice well. We traveled until midnight, when it became too dark to see our way. We made some coffee and ate the last of our food. We cared little, for we knew there would be more on board the ship. All had been tired, but after we had finished our coffee we younger boys were refreshed and wanted to go on. Strange to say, all volunteered to go. The ship was still five miles away. I especially wanted to go because I was so cold, and walking would keep me warm. Instead of going a little way, as we were told, we ran all the way to the ship, but in wading through the water, got our feet wet.

"The ship was on top of the ice. One side held some water, causing it to tilt. The propeller was wholly visible; one blade was broken at the base and the other at the tip. The third was not broken at all. We found a ladder hanging from the stern; otherwise we could not have gotten onto her deck, which was 30 feet above the ice. We went through her cellars, the engine room—in fact, we explored her thoroughly. One of the boys built a fire in the ship's big range and made some hot water for us for we had no tea or coffee. We found some jam, cheese, a keg of pickles covered with yellow scum which tasted like mustard, and some soda wafers.

"We ran up the flag as a signal to the Barrow folks, to let them know we were on board and that we were enjoying our piracy. I did away with my wet clothes and set out to find others to replace them, finding drawers, socks, undershirt, shirt and pants. Eventually I found water boots and was all dry and comfortable again. The others did the same thing. Some changed merely for fun, especially Michael. He emerged from one of the doors clad in white pants, coat and hat. Fat as he was, he made a comical sight. Someone took a picture of all of us in our make-up clothes. At a glance one would think we were all crazy passengers or something, so disorderly we appeared in our clothes.

"We arrived at the ship about four o'clock that morning and left at six in the evening, carrying whatever we had found. Each one's load depended on what he wanted to carry. We rested for the second time after a mile and a half, then we remembered the radium; Robert Brower and I recalled that we had seen a small box labeled 'Radium'. They sent three of us back to find it. All we could find was a small box with no name on it. We opened it and took the contents. We ate the food left on the ship, then rejoined our party.

"The weather was still at its best. We seemed to have drifted farther north. After much hard work we reached our boats and started for home. Alfred's bunch, who were heading for the ship, passed us during the night. They had been sent to find an electric compass. This was long ruined from long exposure. After they had passed, we made some hot coffee (we swiped some coffee from them). We had a little cheese and cake, since one of the men had found a whole round cake in one of the passenger's trunks, and all of us had a bite. What we ate was far too small—by exact measurement it was enough to fill just two teaspoonfuls, but hot water was abundant and we filled up on that. Some of us had not slept since we left Barrow, although it was now one o'clock Monday. We had to keep going at all times, for we were drifting farther and farther away every minute.

"Late that afternoon we neared the edge of the ice. We kept well off the edge for the wind was still at its best and it was raining hard. We could do no more that day so we had to stop until the wind died down and it became less dangero[illegible] for us to start out. Our boats were not worthy of such a sea. One was worn out at the bottom from dragging on the rough ice when the sled rocked from side to side, and had to be repaired. One of the men was carrying some very heavy duck, which he had intended to unweave and make into nets, and we used that to cover the holes, and it served the purpose well.

"We slept little that night because we were so wet. We made a windbreak by turning our boats half over, which served to keep the rain off as much as possible. I shiver now just recalling trying to sleep, as I was so cold. The next morning the weather was very calm and warm, but foggy. There were no signs of water anywhere when the fog lifted so we knew that we would have to pull our boats much farther on the rough ice. We didn't like this. We started again and made slow but fair enough progress for fellows as hungry as we were, for we had had nothing to eat since that last coffee. We drank lots of water to keep ourselves warm and limber.

"Midafternoon Tuesday we stopped again to rest. Some of the boys had killed two small birds, a kittiwake and arctic tern. We boiled these and ate them, then drank the broth. Small food for our big stomachs, but we had nothing else. One of the boys said he heard something, then we all listened; and believe it or not, most of us heard men hailing clearly as if they were only half a mile away. Thinking it was Alfred's bunch, we answered. Twice we heard it. There could be no mistake. The fog was very dense. We did not trouble to look for them but went straight toward them. We toiled the rest of the day and by night came to a place where the ice spread out a little more, enabling us to paddle here and there, which was quite a change for us. Open water could not be seen because of the rough ice. The ice grew thinner and thinner, much to our relief.

"Just then I began to go through my usual program when I get very hungry, vomiting yellow bitter stuff. I had been expecting it for a long time, yet it came when I least expected it. One of the others had done it, too, and they made him lie down and rest. I did not want them to know about me and did not make much noise. One saw me but to my relief did not tell the others.

"We traveled two more hours and quite unexpectedly came upon Alfred's crew. The first thing we did was to ask them if they could give us something to eat. They gave us a small salty cracker, the smallest kind I ever knew, and a little seal blubber to go with it. We asked them about their hailing us, and to our disgust they denied making any noise that day. We did not pause long because every minute was precious now; we had to travel while we could. This time we had a ten-horsepower motor, and were towing both Alfred's boat and one of our own, but we made good time. We had not gone far when one of the boys shot a seal. Our joy was more than I could express. We stopped on the next suitable ice floe and devoured it. It was a small seal, merely a 25-pound yearling for all 29 of us, but we had a hearty feast of it.

"Before us lay the clear Arctic Ocean and no ice anywhere to hinder our progress, except possibly an iceberg 30 miles away. We were very uncertain as to our bearings. To Max and Michael it was a different story altogether. Max had been telling us that we were north of the Seahorse Islands, and if we continued our present course, we would strike shore somewhere near Skull Cliff. I could not see how he could know our position. We were four hours reaching the iceberg. It was about 26 feet high and from its summit we could see land for the first time since what seemed ages ago. It was like a mere pencil mark far on the horizon, but it gave us a lot of joy and courage. We could see that one place was higher than the other, and we guessed that to be Skull Cliff and headed toward it. Max had made good his word.

"We changed our course eastward, expecting to land near the shelter cabin. Now we had a good tail wind to help us. The current also was inshore. It took us five hours to reach the land, but it was a great joy to have solid land under our feet again. In fact, we yelled. We estimated we had been 80 miles out when we left the ice. We found lots of food in the cabin. We took a whole seal, a big one this time, and ate it up, and some white man's food also, not hesitating for a minute. This was a real Thanksgiving feast. We stayed there about two hours, when we started for home, sweet home.

"The breeze was good as was the current. We traveled for about an hour and steered between two large pieces of ice where they were quite a distance apart. I had the rudder at the time. Guy Ahmayurak had been steering and was sitting peacefully smoking his cigarette. I asked him if it would be safe for us to pass through, and without realizing the danger, we both decided to pass through. The last canoe in our tow was caught in the shapeless white jaws of the ocean. It was caught squarely in the middle, and the frame was completely broken through but held in place by its skin. They tied it up and applied temporary braces. It would have been more severe had it been caught in any other manner. Five or six men were sleeping inside the low covering of the canoe and would have been killed instantly. I waited to see what they would say to me, but nothing was said, and that did not relieve me at all. The fact was that they would have done the same if in my place.

"We stopped again after another hour, this time on the beach half a mile from where Rogers and Post fell. At that time I never even dreamed there were such great Americans by those names. We built a big fire there and warmed up. They talked of leaving the canoes there and walking home, as the ice was getting heavy and slowing our progress very much. They also talked of sending Herman Seleona and me on to Barrow. Although it took us quite awhile to reach shore, it seemed like a minute after all the days we spent away.

"All of us had lost a lot of flesh hoping to gain a few dollars. In view of the time spent, hardship, strength, and above all, hunger, we felt good to know that we had the endurance to withstand it all.

"Now these sheets are typed on the typewriter taken from the Ghost Ship *Baychimo*."

Eskimo in parka typical to the Barrow area.

Native Legends

The art of storytelling was highly developed at Barrow. The tales undoubtedly were handed down from generation to generation and probably were added to as new adventures occurred. Even the dances were stories in pantomime. The old folk delighted the youngsters with their storytelling; it was one of the chief sources of entertainment during the long nights. The narrator usually sat in one of the village houses (with all the people the room would hold) and held his audience spellbound until some persons began to fall asleep; then all would adjourn until the next evening. Some stories required several evenings in their telling. I listened to them and relate them here as told to me.

There were legends about the coming of a great flood which covered the earth. There were old people in the village, I was told, who remembered seeing the high hill where the big boat was kept. During the flood the people in the boat became very hungry and were about to perish when they came upon a whale and killed it (there lived old ones in this village who had seen the bones where the whale was eaten). The celebration of Nullakatuk, which follows the whaling season, may be a re-enactment of this ancient myth.

I heard another flood legend: "Before the big flood, all the inhabitants of the earth were animals. All spoke with the same tongue and all understood each other, but the animals interbred and degenerated. There came a time when great rains began to fall, and rained for many days and nights. High water came and all the land was covered. Only an old walrus remained. He floated around looking for land. Day after day he floated and looked, but nowhere could he see anything but water. Finally, exhausted, he reasoned, 'I have been a good old walrus; I have lived a long time. It is just as well that I give up and drown.' So saying, he stopped swimming and prepared to sink. To his surprise, his tusks touched sand. In a short time sand appeared under his body, then to his right and to his left. From this survivor came the Eskimo race. The place where the old walrus touched ground is now called King Island." This story may account for the markings on the parkas worn by the Eskimos of the Arctic Coast and the two white strips of fur on either side of the face of those parkas which extend down over the chest and have a striking resemblance to walrus tusks.

Other stories seemed to be for entertainment only, like the following: "Once a little girl lived with her grandmother. One day her grandmother told her they would race to the bend of the river near where they lived, and the one who won the race would eat the other. They started. The grandmother ran along, singing very happily. Pretty soon the old woman became tired and sat down to rest. The little girl then passed her. The old lady turned into a ptarmigan and flew away. The little girl was very lonely so she turned into a flower."

And another: "Once upon a time there was a village with many people in it. The young men of that village heard that a beautiful girl lived in another village. One by one they went to get the beautiful girl for a wife, but none ever came back. There was an orphan boy in the village who had nothing and a rich boy who had a pretty sister. The rich boy had heard of the pretty girl in the other village, and wanted her. He was afraid to go for her, so he told the orphan boy to go bring her, and for this, the orphan boy could marry his sister. The orphan was very happy, and started out. He traveled seven days, and finally came to the village. He could see no one. There was a big house in the center of the village, and he knew she most likely lived there. As he watched, he saw a girl come out of the house and dance several times, but he was afraid to go to her. At last he went to the house and looked into the skylight. There was a girl moving around, cooking something, but she was dead. Her parents were with her, but they were dead also. The orphan boy knew then he had come to a dead village; everyone was dead. As he watched, the girl spoke to him and told him to come and get her. He was afraid, but he knew that if he did not obey, her spirit would kill him. He realized then what had happened to the other young men who had gone for her, so he went in and got her. She was just bones, with hair over her face so he could not see it. That night he felt something cold beside him, and awakened to find a coffin beside him, and the girl in it. In the morning he took her out and went on his way home. The next nights the same thing happened. The fifth he awakened and the coffin was not there. The girl had flesh on her bones, but she was not breathing. Still he continued on home. The sixth morning he awoke and her body was hot, her cheeks pink, and she was smiling. After a while she awakened and was very happy. The next day they arrived in his home village. The rich boy was afraid of the pretty girl because she came from a dead village. The girl did not want to marry him because he was afraid of her, and for a better reason: she had fallen in love with the orphan boy. She said he had brought her back to life. So they were married and lived happily many years, and became very rich."

And still another story, told by Steve Hopson: "Two old people by the name of Capetak lived at Cape Prince of Wales. They did not have any children. The old man made a living during the winter by trapping foxes. It was a custom in the old days for a person, after catching five foxes, to spring all his deadfalls, and this he meant to do. He set out, accordingly, to look for them. He had not gone far when he noticed that his legs were a lot different than before. He was old, but he felt like a young man; his legs did not tire as they had before. Soon he came within sight of one of his deadfalls, and he saw a strange thing. The trap was opening and shutting. At the same time, he noticed that he was walking faster and faster toward his trap, and though he tried as hard as he could to walk slowly, he seemed to go faster still. Finally he went right into his trap and was held fast. After a while he heard two men talking; one was telling the other to free the old man, the other answered he was scared. They kept coaxing one another for a while; then one of them took him out of the trap. When he stood up, he saw one of the men was dressed in a parka trimmed with wolverine and wore a wolf's head mask. The two mysterious men took hold of him and began shaking him. In those days young folk were not supposed to drink out of the pot without a dipper. But this man had disobeyed the rule, and when they started shaking him, old pots and deer hair and dirt began falling from him. When they finished shaking him he stood up and saw that he was a young man again.

"The men informed Capetak they had come to take him to their place. Capetak made excuses, saying he had a wife and he must go back to her, but they insisted he accompany them. They told him their place was nearby, and that he could return to his home afterward. Thus assured, he reluctantly gave in and allowed them to put him on one of their backs. They told him to close his eyes and go to sleep. When the men stopped, he awakened and stood up. He saw that they were beside a mound which had an opening at the side. They took him inside, and he saw that he was in a house. On the south side of the room were people masked with fox heads; on the north, with wolverine heads; on the west, all were masked with brown bear heads; on the east with wolf heads. They seated him on the west side toward the entrance, beside one of his rescuers.

"After they were seated, one of the people in the house spoke up, asking for a kayak, and one was brought. A man masked with a fox head placed the kayak in the middle of the floor and began paddling. A seal came up through the doorway and the man speared it, then let it drop back through the doorway, saying, 'Go ahead and cook the seal.' In a little while a platter full of seal meat came in through the doorway, and all the people started helping themselves from the platter. Capetak's rescuer then told him to dip his hands into the juice and say at the same time, 'Now I have my spirit back.' Then another man spoke, saying, 'Now let us start giving him power so that he will always do the things we show him.'

"A third man spoke, saying, 'Someone bring a seal net.' He brought a net, and began setting it down the entranceway. This was one wearing a mask of a fox, and he began catching seals, one after the other. He told Capetak he would have the power to do the same thing.

"A fourth man stood up, and this one wore a wolverine mask. He began walking around the floor, working up his spirits. He then went up to the wall and shoved his arm into the side of the house and began pulling. Finally he pulled out a coffin wrapped in an old canoe skin. He began working on the dead person, and after a long time brought it back to life. He then wrapped it up again and placed it back in the same place. He told Capetak that he would have the power to do the same thing.

"Still a fifth man stood up. This one was masked with a wolf head. He walked around the floor for a while, making motions as if he were chasing a caribou; then he shouted, and the side of the house opened up and they saw a herd of caribou running by. The man brought forth a bow and two arrows, and with them he shot into the herd and killed two. He pulled them into the house and the wall closed again. He told Capetak that he would have the power to do the same thing.

"A sixth person stood up, and this one was masked with a brown bear's head. He opened his mouth and began showing it around. They could see all kinds of animals in his mouth. He turned his tongue upsidedown, and all the animals disappeared. He told Capetak that he would have the power to do the same thing; telling him that if anyone should do anything to displease him, to turn his tongue upsidedown and his enemy would have no game to kill.

"A seventh person spoke, telling Capetak that if he went whaling and caught a whale, he should take a piece of the whale from near the tail, and place it to one side where there were no tracks.

"Capetak followed his rescuer from the house, and outside the rescuer told Capetak to look back, and Capetak saw only a mound; the entranceway had disappeared. Capetak then started on his way home. When he got home he found that his wife was fast asleep. He saw, also, that she was still an old woman, so he lay down in the middle of the floor and fell asleep. When the old woman awoke, she saw a stranger sleeping in the middle of the floor, a man she had never seen before. When he awoke she began to question him. She asked him if he was Capetak, and he said he was. Then she realized that something strange had happened to him, making him young again. He continued to live with her, and they stayed the remainder of the winter at Cape Prince of Wales. When game became scarce during the latter part of the winter, Capetak called the village to a meeting in the kashga, and after they had all assembled, Capetak asked that someone bring a seal net. When it was brought, he began setting the net in the entranceway, and he began catching seal, one after another. He caught enough so the whole village had plenty to eat.

"During the winter, the daughter of one of the chiefs died. Capetak called a meeting again at the kashga. After everyone had assembled, he began working his spirits. He walked around the floor for awhile, then went up to the side of the kashga and shoved his arm into the side and began pulling. He pulled out a coffin from the side of the house, and opening it, began working his spirits over the dead woman. After a hard struggle he finally brought her to life, and when the gathering saw it was the daughter of the chief, the parents were so happy they gave her to Capetak to be his wife. Now Capetak had two wives, an old one and a young one.

"It was getting toward spring now, and Capetak again called a meeting at the kashga. This time he took both his wives along, also his bow and two arrows. After everyone had assembled, he stood up on the floor and began making motions as if hunting caribou. Then he shouted, and the side of the kashga opened up and they saw a herd of caribou passing by. He shot his two arrows and killed two. He pulled them inside, and the side of the kashga closed again. He divided the meat up among the people, saving some for himself, too. Then they prepared the meat for the whaling season.

"Capetak told the old wife that after they went whaling, if she should see a stranger at their entranceway she should tie his drumstick to the stranger. Then Capetak went whaling. When they came to the edge of the open lead they prepared their boats and equipment, and as soon as they had made them ready, a whale came up and they struck it. At the same time, the old wife (who had remained on shore) heard a strange noise in the entranceway, so she tied the drumstick to a pole held out to her, exactly as Capetak had told her. In a little while a runner came, saying Capetak had caught a whale. Every time Capetak caught a whale he took a piece of the whale from just in front of the tail, and placed it to one side where there were no tracks. Each time he did this he saw a brown bear come and take it away.

"The little old woman kept tying the drumstick every time she saw the pole appear. Toward the end of the whaling season the pole came up through the entranceway, and she got in such a hurry while tying the drumstick that she tied the drum along with it, and both disappeared. Capetak did not catch that whale; did not even see it. He heard the drum afar off. Thereafter, they saw no more whale. Capetak then went ashore, and he became very cross at losing the whale. He turned his tongue upside down and all the animals disappeared."

Another story as told by Nathaniel Eknanens: "Once there was a man who was called Baldhead. Though he was a young man, his hair did not grow. He was one of the best hunters in the village. As he hunted one day, he saw some young women bathing in the river. He crept close to their clothing, and when near, ran for them. Three of the women recovered their clothing, but two did not. The three who beat him in the race for their clothing flew up as brants. He married the other two and took them to his house. The villagers saw his wives and they admired them.

"The other men of the village met together in council, and they decided to kill him; then the first to reach his wives would wed them. There was a cliff near the village, so the men gathered there and took a log and balanced it over the edge, while two men sat at one end; then another man tried to walk out to the other end. Soon the intended victim saw them, and wondering what they were doing, went out to them. Now this young man's grandmother had given him a piece of eiderdown as a charm, so he could transform himself into a little piece of eiderdown. So when he got there, they told him to try to get out to the end of the log. He obeyed them, but as he came to the end of the log, the two men that were sitting on the log let go, and he fell off and went down over the cliff.

"The men started to the house where his two wives were, and when they rushed into the house they were amazed to find him with the two women. He said to his wives, 'I think these men have come to eat; make a meal for them.' The men ate, and left for their homes.

"Now it was the season for the men to go whaling, and the man wanted to go, but the wives tried to persuade him to go inland instead. The man insisted, and went whaling, though very much against their wishes. He was a harpooner for his crew. One day they harpooned a whale and they tied him to the end of the line and threw him overboard; then they paddled to shore and raced up to his house. As they drew near they saw the two women on top of their house. The women watched the men race toward them, and they wondered what they were running for. When they found they were heading for their house, one of the women called like a ptarmigan and flew into the air, and the other squealed like a squirrel and ran into a hole, and again the men were disappointed.

"Meantime, Baldhead was being tossed about by the waves, and suddenly found himself alongside the whale he had harpooned. He struggled to stay afloat, and after a long time both he and the whale washed ashore at the mouth of a little creek. Baldhead untied himself and began building a little house for himself.

"After a while the creek froze up, and he hooked some trout. Then he went out sealing and brought many seals to his little house."

These are some of the many tales told the young people and handed down from generation to generation.

South from Barrow

Steve and Terese Hopson beamed at their first-born. The little fellow was just saying "Hello" to the world, and I had just finished my last bit of work at Barrow. Even as I walked out their door I heard the deep-throated bellow of the *North Star* as she approached the land and dropped her anchor a mile offshore.

I joined the few whites and throngs of natives on the beach, and when the ship's launch came ashore, welcomed my successor. He was short of stature, rotund, with a thatch of red hair crowned by a beaver cap. A small, sandy mustache adorned his upper lip and a long-stemmed Dutch pipe hung from his mouth, the bowl of which, large as a coffee mug, rested on his chest. Otherwise he wore the fur dress that marked him as coming from the Yukon country.

I went aboard ship and found many Department of Interior employees there, most of whom were officials. There was the medical director, also a doctor from the territorial health bureau in Juneau, an inspector of native schools, schoolteachers, Mrs. Wiley Post, and others with no apparent connection with the government service.

Our medical director had been ill, and did not want to go ashore. He informed me he wished us to go to Bethel, but thought we would have to spend the winter in Akiak, as he did not know of available quarters in Bethel. His next words surprised me: "How are you going to get to Bethel or Akiak?" Months before, we had received a letter of transfer, over his signature, which read, "To Bethel via *North Star*." At the time we gave it no further thought, for as medical director, he could order us anywhere in the Territory by any means of transportation he might desire. Now he told me we were to go to Nome by the *North Star* and fly from there to Bethel. Meantime, our belongings would be carried on to Seattle and stored until next year.

I went home with this bit of information, and told it to Virginia. We were of the same mind; we would not go to Bethel without our goods. They were all we possessed; our lifetime accumulation. Virginia had her keepsakes and linens, I my medical books and sketching material—all irreplaceable—plus our radio, records, and materials bought to help us pass the long winter. All this was of considerable value and easily ruined by improper storage. Besides this, we had a vivid recollection of our losses when we moved from Akiak to Barrow.

The medical director appeared unrelenting. I sensed he would have his own way, regardless of inconveniences and hardships caused others, and suspected he would be all the more determined if opposed. We were to meet a small ship, the *Boxer*, and this ship sometimes called at Bethel. We asked if it might be possible for us to transfer to that ship. The medical director estimated two additional days would be required, and the cost a hundred dollars a day. We offered to pay this, but he would not consider it.

That night Virginia and I reviewed our situation. We had been caught entirely by surprise, and so far as we could see, our predicament was an unnecessary one. We soon came to a decision. We would go aboard the *North Star*, and if not taken to Bethel, would continue as passengers to Seattle. Conditions in the States were bad, no doubt, as every letter we received stated. We would have a struggle just to exist, and would have to make a new start. But after all, it might be best for us, and certainly preferable to spending the winter at Akiak without our personal belongings.

We expected to go aboard ship, and when our successor came with his baggage, we turned our quarters over to him. But the captain announced that no passengers would be taken aboard until the ship was ready to sail. We returned to the doctor's quarters and waited.

A storm swept down on Barrow. The wind blew a gale, and snow flew like shot straight above the ground. No attempt was made to lighter goods or supplies. I asked an old native his opinion of the weather, and he replied, "I'll look at the barometer. It going down; guess we have change." We laughed. Even the native had gone modern and no longer relied upon rheumatism or other weather signs or experience.

The new doctor was a single man, and the cook and the nurse were unmarried. The people of Barrow were much perturbed at this situation, but the ones most concerned were unaware of the near scandalous position they occupied. The doctor busied himself with his medical work. An old native with a hernia came, and the doctor decided he would operate at once. He found operating in a snowhouse or igloo had its difficulties. For an anesthetic we had ether, which is volatile and hence explosive. (We had found it necessary to extinguish the fire during operations and until the room had cleared of fumes afterward.) This first operation discouraged the doctor, and he decided the hospital was too primitive. He reorganized the medical setup. Thereafter, all medical personnel would occupy the various rooms in the physician's residence, and two rooms would be used for a hospital until the new one was completed, and forthwith, he abandoned our temporary hospital.

The doctor and nurse replacing us had already established their routine by the time we left. They established visiting hours, and hired an Eskimo girl to assist with the nursing. Other changes quickly followed. A short time later, five days we were told, a plane called at Barrow, and the doctor flew out as a passenger, already tired of Barrow.

The storm continued, and the captain threatened to run for Wainwright, where he would unload Barrow freight. He seemed awfully uneasy about the Arctic. Perhaps he was thinking of the more than 3,000 ships that had been lost in the Arctic in past years. Even so, our faith in the men who sailed those government ships was somewhat shaken.

Kelsey, the Irish building foreman for the Barrow Hospital, wanted his lumber and supplies, and we wanted our belongings aboard ship. The captain had moved the ship farther offshore and withheld permission to load. The wind continued unabated. Tommy Brower, who had contracted to take our belongings to the ship, came and told us he was anxious to take our things. He wished to leave for his home, which was far inland, as soon as possible. He said the ice was forming in the lagoon and that the time remaining for him to make the trip home safely was short.

Tommy suggested we put our goods in his boat, which he had placed on rollers of small round logs on the beach, and shove it into the water; so, with the help of practically all the menfolk of the village, we launched the boat. It was a whaleboat, 36 feet in length, but, even so, we rolled and pitched in the rough sea. From shore, we disappeared from view at times. However, we arrived safely at the ship and lay in her lee while the mate swore he would not take our goods aboard. He reconsidered, and after another delay, a boom swung out and they were lifted over the side.

When the native store people saw our boat go out they launched theirs, and soon there was a steady procession of boats taking cargo. I rode one of the boats ashore, and when 200 yards from the beach, the boat just ahead swamped. The native in charge of my boat threw out an anchor, and we sat there for almost an hour before he decided to attempt a landing.

I paid a farewell visit to Mary's grave, my last call in Barrow, then we went aboard. All the village natives were on the beach to shake our hands and tell us "Goodbye," and I had a big lump in my throat as we clambered into the whaleboat and put to sea. All waved and shouted "Goodbye." They waved and shouted until we were far out and the roar of the troubled sea drowned out their voices. We hated to leave them, and it appeared they were sorry to see us go.

We stood at the rail, knowing we were looking our last at Barrow, when a resounding "All ashore that's going ashore!" rang out. Many Eskimos filed past, shaking our hands, then climbed overboard into their boats bobbing on the ocean. They waved and shouted until the darkness enveloped them, and as the ship's propellers began to turn, their beautiful, rich voices floated on the night air, singing "God Be With You, Till We Meet Again," and then faded away, as did the lights of Barrow.

It was September 13, Virginia Lee's (Koyana's) birthday; she was one year old. She would be a constant reminder of that part of our lives, the eventful months spent at the "top of the world," Point Barrow.

The *North Star* was a wooden, round-bottom boat built for those waters. Ordinarily she rolled and in rough weather was very unsteady. But in the quiet Arctic waters she was quite stable. In the night we heard the sailors calling out soundings along the Seahorse Shoals, but when we finally awakened it was daylight, and we were anchored off Wainwright. I went ashore. The buildings were old and odd in appearance, and many were painted red and green. That night, many of the passengers and crew, braving a choppy sea, went ashore to attend a native dance. We sailed at midnight and arrived at Point Hope early next morning. The sea still being rough, we dropped anchor and waited. The coast was very low, appearing as a sandspit, with houses for about 30 families. In the daylight we saw mountains on the horizon. The sea calmed and we went ashore. There was a school for the natives and an Episcopal Church. These were separated by about a mile of beach, the entire area an old graveyard, with graves marked with whalebones. The two bones of each whale jaw were six to nine feet in length. It was a bleached ghost forest over the entire sandspit. One area was fenced with 800 of those bones; apparently a Civilian Conservation Corps project had done this, taking many individual markers to make the large enclosure.

Point Hope was an old whaling station. The population showed a mixture of races, with many curly-haired children; the mouths and noses of many did not resemble those of the Eskimos. We observed that the Point Hope natives were better clothed and housed than the villagers to the north. Also, Point Hope had no trader; only the church, school, and community store.

We found Kivalina the most picturesque place of all those yet seen. The school buildings stood on a little brown and yellow island, or sandspit, and a lagoon ran inland toward the lavender and blue mountains. We did not go ashore for several hours because of rough seas. The following day, the natives brought five hundred reindeer intended for sale in Seattle. The meat brought five or six cents a pound there, and helped finance the native store.

At Kivalina we saw the sun for the first time in many days, and we felt so good the mates and several of the passengers piled aboard the ship's launch and went fishing in the Kivalina River. We had an enjoyable outing, though we did not catch a single fish. We watched a gorgeous sunset, but the wind increased and the ship began to roll, and many passengers turned in early. Mr. Nichols, the Kivalina teacher, his wife, and infant daughter were brought aboard and we were on our way again. After a few hours we anchored at Kotzebue.

Finding the weather fair at Kotzebue, the launch was put overboard, and many of the crew and passengers went into the village. They returned by evening and we again got under way. The crew brought back a glowing account of business conditions in the village: $38,000 in beer had been consumed during the preceding eight months, six times the per capita in the States.

Next, we were off for Shishmaref, a village just south of the Arctic Circle. We discharged cargo there, then continued on toward Wales. The sky was filled with clouds and the sea was rough. Soon we saw on our right Big and Little Diomede Islands.

By nightfall we reached Wales, on the westernmost part of the U.S.A., Cape Prince of Wales, and stopped for a short time. Wales, a high rocky hill with a native village nestling on the beach at its base, was the new most picturesque spot yet seen, perhaps because of the beautiful, sandy beach and the rugged coastline alongside and high, rocky cliffs and mountains, storm-swept, in the immediate distance. As we dropped anchor, a fleet of skin boats crowded out to meet us and the village supplies were soon overboard. Many Eskimos came aboard, wanting to go to Nome. Some wanted to go to the hospital for removal of tonsils, and others thought their appendices should come out. One older lady wanted to go for a tooth extraction. Both Mr. Lysted, the first mate, and I volunteered to pull it, but she did not want either of us to do it. We persuaded her to sit in a chair in the ship's infirmary in order to inspect the tooth, and the next instant the tooth was out. Still wanting to go to Nome (and not able to think of a good reason why she should) she was sent ashore, much to her disgust.

Down the coast we journeyed in leisurely fashion, past Teller a mile or two, and came to anchor. The ship's water supply was getting low, we were told. One of the lifeboats was lowered over the side and placed on the ship's lighter, then towed to shore just where a little tundra stream tumbled into the ocean. The crew, forming a bucket brigade, dipped the water from the little stream with five-gallon gasoline cans, and passed the cans from man to man, the last of the line pouring each can into the lifeboat until there was about a thousand gallons, which was brought alongside the *North Star* and pumped into its water tank. Then we moved before Teller village, where we anchored and went ashore.

One of the passengers gave a farewell party on board ship. Most of the men drank rum and it was a hilarious group that set out for the village that evening. Our launch carried us into a queer little harbor strewn with many old, wrecked and rotting ships, their keels fast in the sand and ribs bare like skeletons bleaching in the weather.

Teller was a ghost town, there was no mistaking that. We walked down the old street between rickety, weather-beaten buildings, with nary a person in sight. It was truly a deserted mining village. We paused before one of the buildings from which came the squeak of a phonograph. A weathered sign designated it as the "Teller Dance Hall." The windows were partly boarded up and paper cartons and boxes had been piled in front, giving it the appearance of an abandoned building. We made our way around to a door at the side and threaded our way between piles of empty boxes and crates in the entryway, and emerged into a barn-like room. An ancient phonograph rested on an apple box. It squeaked out a tune from a badly-scratched record. One couple was on the floor;

a man, a much weather-beaten Norwegian, held in his arms a stout native woman as they shuffled around in a dance. There seemed to be no other participants, so after watching the struggle for a while, we continued on through the village.

There were two or three small trading posts that supplied miners their outfits and goods to the villagers. We found the reindeer supervisor and spent the evening with him. We returned to the ship later that night.

Captain Witham was again complaining about the use of the ship's water by the passengers, and we received frequent lectures about saving water. Long since, all shower heads were removed from the staterooms. We felt most fortunate in having a stateroom which had a small toilet and sink. Virginia was able to rinse out a few of the children's clothes, as needed. We had prepared for the trip by having disposable diapers for the baby, so we used little water. However, Mr. and Mrs. Nichols were not so fortunate, and though we spared them as many of the disposables as we could, they were in need of doing part of their laundry, so suffered the captain's ire to a greater extent than did the other passengers.

Once more we were to take water. This time the ship's tanks were to be filled. We went to a different place and anchored about a mile offshore, before a little mission located a few miles down the coast from Teller. The ship's barge was lowered to the water and a lifeboat then let over the side and placed on the barge and made fast in an upright position. The passengers were anxious to go ashore; all wanted a chance to walk on land. Soon the ship's crew was busy with a gasoline powered pump, borrowed from Teller, which they had placed upon the sandy beach about a hundred feet from the ocean; the barge had been brought as near the land as possible. I could hear the pump's engine give a few coughs and then die, and for want of something better to do, I joined those watching the engineer work.

I soon became more interested in our water supply. It was a little stream which ran down from the mountain, through the tundra, to the beach, where it ended in a small pool dammed behind a sand bar. The stream had cut deeply, and the banks were steep and heavily eroded. As my eyes followed the banks to the skyline above, I held my breath, horrified; I saw a forest of crosses silhouetted against the sky, and nearer, bones from graves which were falling away, and lay partly in their original resting place or had slid down the bank to the water, where they rested. I climbed up to better survey the spot, and I counted more than a hundred standing crosses; some weathered, but many brightly painted and apparently new.

I could hardly believe that we were to take water from that source for our use aboard ship, but the fact was indisputable. This was our drinking water, and all we would have to live on for the next few weeks, for on board ship there was no other liquid to be had except at mealtime, when we were given coffee. I pleaded with the captain, the first officer, and all others in authority, pointing out the hazard of drinking water from such a polluted source, but they paid no heed; nay, seemed delighted at our concern, and continued until the tanks were full.

Virginia and I turned away. Seeing a group of buildings, which we had been told were the buildings of the Lutheran minister, we made our way there and called on the man and his wife, finding them very amiable. Their home was comfortably furnished with modern furniture and contained many souvenirs and books. They told us they had been in Alaska only a short time, having spent most of their lives in China. They were homesick and were hoping to be returned to their former home.

To my inquiry as to why he liked China, he said he preferred the Chinese people, who treated them better than did the Eskimos in their parish, who were very poor workers and rather poor churchgoers. He could not grow accustomed to their habit of wandering at will, and he found it difficult to keep track of them. Virginia and I enjoyed getting these strangers' reactions to the Eskimo. It was so different, or rather opposite, from the way we regarded them. We knew they must be pretty unhappy.

We returned to the ship and whiled away the time as best we could. Having no reading matter or games to play made the time pass slowly. We did find a worn deck of cards, and someone knew the game "Sol," and in the days following we became quite expert at it. When thirsty, we would recall the source of our drinking water. Yet the time came when we could hold out no longer, and we quenched our thirst. But we never did forget the little tundra stream from which our water came.

We sailed that afternoon for Nome. The wind came up and the sea became rough, and when we neared Nome, we saw that there was no harbor but only a sandy beach and a breakwater built in front of the dock area; we knew we could not go ashore. Our boat continued on down to Golovin and came to anchor a mile or so offshore. The wind and rain made the night miserable. There were two teachers who had spent their summer vacation on the ship, and they prepared to leave us, as this was their station and they were home for another year. They said goodbye and descended the Jacob's ladder into the launch and were whisked to shore. Several tons of supplies followed them, and when this was done we remained at anchor. We learned that the other Department of Interior boat, the *Boxer*, was to meet us there. We peered into the night, and eventually saw a dark hull with two masts, which positively identified her. Soon she was alongside, giving us fuel as well as cargo to be unloaded at the various villages we were to visit.

The *Boxer* was a small ship, originally a sailing vessel, but recently the masts had been shortened and two 300-horsepower diesel engines installed. She could only make about seven knots an hour in favorable weather. She carried about 400 tons of freight and a few passengers. Her passengers were schoolteachers, men and women enroute to their stations, whom we saw perched on top of a pile of lumber on the ship's deck. There in the storm and rain as they were, we thought them a rugged lot, for they were certainly having to take whatever came their way.

The *Boxer's* decks were entirely hidden by supplies, which were piled high all over the vessel. Because the *Boxer* was of shallow draught and small size, she was used to take supplies into more inaccessible places. Some of the teachers had been on the vessel four weeks and still had more to go before they would reach their destinations. Their staterooms had a porthole for light and ventilation, and a small door opening into the central messroom. The rooms contained bunks, but were barely large enough to turn around in. The occupants had to either lie in their beds or spend their time on deck, only a few feet above the ocean; in anything but good weather, they were drenched with spray and lashed by the winds. Most unfortunate were those who were seasick the entire journey. We agreed—theirs was an unenviable lot.

Just as the hands of the clock pointed to midnight, the clanking of anchor chains and throbbing of the ship's engines told us we were again on our way. On September 29, 1938, we awakened to find that we were at anchor about a half mile offshore Nome.

Nome

On the 30th of September we were permitted ashore. The Coast Guard cutter drew alongside and Virginia and I climbed down the Jacob's ladder; when the cutter was underneath and still for an instant, we dropped into its hold. Paul and baby Virginia were swung overboard by means of a rope noose fitted underneath their armpits. A sailor played out the rope, and they swung like pendulums as they descended into our outstretched arms. The cutter ran in behind the breakwater and drew up to the dock beside a boat we recognized as the *Nanuk*, with which Captain Castell had visited Barrow. It seemed good to have earth under our feet again.

We accompanied the other passengers, and soon were on Nome's main avenue. It was a dirt street, with wooden sidewalks edging the wooden buildings, all one-story and unpainted, old and weathered, and in such disarray one might think an earthquake had very recently upended the town.

The city sprawled for a mile or more along the seawall, with one main and a few minor streets. A few of the buildings along the main street were of fair construction, but in all other sections of town the buildings were small, consisting of one- and two-room log houses. The jumble of buildings was due, we found, to Nome's situation on subterranean ice that shifts the ground each winter and summer, and although the buildings originally may have been built square with the world, it required but a short time for them to conform with the [illegible]t of Nome's architecture.

We were thrilled by our visit to Nome, the first city we had seen for more than two years. We called Nome a city because it had always loomed large in Alaska's history. We were surprised at its size: with a population that fluctuated between 1,000 in winter and 8,000 in summer, its official population was 1,213 persons. We admitted this would not be called a city in the States; but here it was a city, and to Paul—well, he just could not seem to make it all out. He stood in the street and looked at the cars as they passed. He stared as long as he could see one; then when one came from the opposite direction, he turned his head like a solemn little owl and watched it out of sight. He was certainly excited. As he stood, a sled dog came up and began to sniff at his reindeer-skin boots, and this finally diverted his attention long enough to swing a blow from the hip, catching the dog broadside. The dog was not hurt in the least, but it sent him on his way, leaving Paul to do his sightseeing undisturbed.

We went to the Nome Hotel, the only one in the city. It was located above the City Garage and appeared to have about a dozen rooms. We were told there was no vacancy. We then went to the schoolhouse, where we were cordially received by the teachers. They insisted we stay with them, but we could see but one bedroom, so we thanked them for their hospitality. We then recalled that the officer in charge of the Coast Guard had invited us to stay with him, so sought out his home. Here, again, we saw but one bedroom in their small quarters, so we thanked them and declined their invitation to remain.

We were advised to call on Dr. Markham, who operated the one and only hospital in Nome, as all travelers in the service usually applied at the hospital for rooms, and to make haste lest all the beds be taken. As we found that we would be unable to return to the ship that evening, we decided we had better take this advice. Dr. Markham was very glad to see us. He was an ex-resident of Oregon and made us feel very much at home. He invited us to dinner at his home and also offered us a room at the hospital. This we gladly accepted.

We then set out to see the town. We visited the stores, which seemed to us enormous. We bought a few toys for Paul and Virginia Lee, and Virginia decided she should have a new dress. Soon we found, much to our surprise, that we had spent a couple hundred dollars, but we agreed it was well-spent and that we had had a good time. In fact, it was almost as good as Christmas.

My real purpose in coming ashore in Nome was to have a filling replaced in one of my teeth. Once in town, I was told there were no dentists. Later while voicing my disappointment, I was told there were two, but I was advised to go to neither. I insisted upon knowing more, and was told both were old, that one drank heavily and the other "likely took drugs." I would go, so was advised to go as early in the morning as possible, since if I did not get to them early, I would be unable to get the work done. I was afraid both would be shaky at that time of the day, but feared they might be worse later. I elected to see the alcoholic old man, who seemed to be the one less poorly recommended. He lived in a little two-room log house and had his office in one of the rooms.

I explained my plight and he brought forth a small canvas stool, unfolded it, placed it before the only window, and invited me to be seated. Next, he brought forth a tall metal stand to which a pedal was attached. He began pumping this with one foot, to operate his dental drill. I observed that his hand was quite unsteady, but my mouth was open wide and the cavity in the tooth was a large one. I hoped for the best. He attempted to fit the drill to the cavity, missed, getting my gum instead, and blood appeared on the window before me and on my clothes; but being persistent, my dentist tried again and again, finally getting the drill into the cavity. He ran it round and round in the manner of one cranking a Ford. Finaly, he seemed satisfied with his grinding so proceeded to fill the hole he had dug. I was happy to have the tooth repaired. I wiped the spattered blood from my face and asked how much I owed him. To my surprise, he refused money. I was grateful and likewise was determined to reimburse my benefactor for his work, so made my way to the nearest liquor store and purchased a quart of the best whiskey I could buy, and when I presented him with it he seemed very appreciative. My only regret was I had not given him the whiskey before having him work; it probably would have steadied his hand.

Finished with the dental repair, I returned to the hospital, where I had a delightful visit with Dr. Markham. I'm not so sure the hospital staff enjoyed our being there, for the children cried most of the night, the result, no doubt, of their trying to eat everything we had purchased for them the previous day.

After making a donation to the hospital instead of paying board (that being the custom), we made our way to the ship. Mr. Springer, of the Coast Guard, called for us and gave us a ride in an automobile. Paul and little Virginia were more than thrilled with the ride, and it seemed very nice to Virginia and me, too. It brought to our attention how much we missed those conveniences of civilization.

We remained that day and the next on the ship, still at anchor off Nome. Then, just at dusk, we saw the ship's launch coming from behind the breakwater, and accompanying it were three or four big umiaks. The King Island natives were coming aboard, and the ship would take them home. This was an annual chore the *North Star* performed.

Early the previous spring, as soon as the ice broke up around their rocky island home, the entire village (the entire population of King Island) got into their big skin boats and descended upon Nome. There they set up camp on the beaches and stayed all summer. They busied themselves carving and selling ivory to residents and tourists, and combing the garbage heaps for articles they might use at home during the long winter. Now their umiaks were loaded, every inch of space filled from stem to stern with family, pieces of wood, old scraps of iron, and dogs. All seemed happy at the thought of going home for the winter.

Winches whined as the booms swung out on the sheltered side of the ship, and lines were made fast to stem and stern of each of the umiaks. Then they were hoisted to the deck of the *North Star*. Some were lowered into the hold, others were left on deck, but the natives themselves retired to the hold of the ship where they made themselves very much at home. They set up stoves and began cooking meals.

As dusk closed in, the weather grew worse. After one trip to our boat, the commander of the Coast Guard protested because of the danger, and told the *North Star's* officers that if they must go back and forth from ship to shore they should use their own boats. Captain Witham went ashore in the ship's launch and ordered the natives out, and the Coast Guardsmen ordered them not to go. Upon the captain's return he seemed very much upset. He ordered the passengers off the deck, yelling, "Get inside, all of you!" We agreed the situation was enough to make any ship's captain wild. Those beautiful white decks were covered with many persons and dogs. It would be some time before they would look white and clean again.

We did not get away that night. Next morning, much to our surprise, Mr. Springer asked if we would like a final trip ashore. Definitely we would. We were to be back by ten that morning, and in that time we managed to buy a supply of fresh fruit, apples, oranges, etc., for the children. Upon our return there was great activity as the crew prepared for our departure. At eleven, the ship weighed anchor and we were away. One umiak seemingly had been delayed, for it came into view just as the anchor thundered aboard, and the captain halted the ship until the umiak could be gotten on deck. Minutes later we departed from Nome.

From Nome to Goodnews Bay

Ahead we saw a long, low rock protruding from the Bering Sea. This was called Sledge Island. Our map showed that King Island lay 99 miles ahead. We dropped anchor beside it just as the sun sank into the sea.

King Island is a very rugged rock jutting out of the Bering Sea. It appeared to be an old volcanic core, a mile in width, possibly a mile and a quarter long, and seven or eight hundred feet high. Legend had it that the natives of the island believed that man was first created upon that rocky island. In 1900 there had been 300 natives, but later sickness killed all but 50 (seventy percent of the deaths were from tuberculosis). In 1939 there were 175. The past year had seen a five percent increase in population.

The village Ukivok was built in a little ravine midway along the south side. Nowhere was there any level ground; houses were perched against the cliff many feet above the water's edge. A seam in the rock to the right of the village formed a large cave, a natural refrigerator lined with ice that had served the village as such for centuries.

The natives on board appeared to be very happy, and lined the ship's rail looking anxiously toward their rock home. As soon as the anchor was dropped, the captain ordered them all ashore, and the big umiaks were swung one by one, complete with baggage and native crew, over the side and into the water. Gracefully, like autumn leaves, the umiaks floated, then the natives swung their paddles and rowed shoreward. Until late that night there was considerable commotion as the crews attempted to land their cargo. Soon lights blinked on the mountainside, evidence that some had been successful. They must have landed despite the rough surf. All did not, however, for at daylight some were still standing offshore, waiting for the breakers to calm, or perhaps waiting their turn at the small, rocky landing.

Next day we went ashore in an umiak, jumping onto a flat rock, spray-drenched, while our boat bobbed up and down, rising and falling three or four feet. We seemed lucky in avoiding the rocks. To get to the village proper we climbed a ladder of several hundred steps which lay perpendicular against the wall. The first building was the government school; the teachers who had boarded our ship at Nome, had preceded us ashore and installed themselves there. We wondered how they would make out during the year ahead, since both were entering middle age, and had married but a few weeks previously, after a courtship by correspondence. The man was from the north and spoke with a Maine accent; his wife from east Texas talked with a beautiful southern drawl. Above the schoolhouse were the weathered, unpainted dwellings of the natives, while still higher was the small Catholic Church, and nearby were three small, white houses, occupied the past winter by the Jesuit priest, Father Hubbard, and his party. Surrounding these was the graveyard, where bodies had been placed in wooden boxes on the rocks. Father LaFortune, the resident priest, had lived on the island the past seven years. He affectionately referred to the natives as "my people."

During our passage from Nome to the island, Father LaFortune, Mr. Cameron, the teacher, and the Department of the Interior representatives passed among the natives, rounding up and interviewing those whom they thought might be eligible for old age pensions. The government people also wanted to establish a W.P.A. project that might employ the natives.

The islanders wanted a road to the village storehouse. They wanted to build it themselves and be paid for doing the work. Already they had their school, with teachers furnished, and medical supplies. They were very anxious for their old age pensions to add to their annual revenue. Everything they ever produced for commerce was sold; they never gave anything away, and never paid taxes. Even after their trek to Nome, a boat was sent to haul them back home. The King Islanders were indeed a fortunate people.

During the day, the village resembled a large anthill; the natives crawled up the ladders to the houses in a continual stream, carrying their belongings on their backs. The houses were all on pole foundations. At the front, they were about four feet above the rocky earth; the backs (or ocean side) of the houses were much higher, from 10 to 20 feet in the air. Garbage lay in piles under the houses, usually on the low side, wherever it had been most convenient to dump; the stench was most distressing. The houses themselves had porches along one side, and poles were laid level from the cliff to the house. The entrance was by way of a door about 16 inches square. A partition divided the house into two rooms; the first served as a playroom for the children or workroom for the grownups, as well as a storeroom. The living room was entered by another door, again only 16 inches square. The inhabitants sat on the floor; the only articles of furniture were small stands and boxes and a stove along one wall.

The Coast Guard ship *Northland* had given the cliffdwellers several pieces of fire hose with which they washed the village, beginning with the top house, and sluicing the whole village to the water's edge once a year. Evidently is was due for another washing.

Beside the buildings were small stone terraces. At the center of each was a small square door. These were food caches, or meat cellars—one for each dwelling. Many small, dried fish were strung on poles that protruded from the corners of the houses. Our path wound between the buildings, sometimes passing underneath them, so that a grown person had to stoop to pass through.

The houses were above ground, which, they explained, permitted the snow to blow away, and prevented its packing around and covering them. Although the village was on the south side of the island, the north wind was most annoying. The wind came whirling over the mountain, producing what were called "Wooley-Walleys"—wild, swirling currents of air formed on the sheltered side of a hill or mountain. They struck with a hiss and bang, driving the smoke and ashes into the rooms, making it impossible at times for the teacher to hold school.

Father LaFortune's tiny cottage was about 12 by 16 feet, and here he held religious instruction daily. He told us he had 40 to 50 persons in each class. How he could get them all into that room was more than we could see. As we walked above the village we came upon many crosses peering above the tall grass and boulders. Higher still, on the skyline, were great perpendicular cliffs, with loose stones, larger than houses. Some of these were anchored with wire cables that appeared to be too frail to be any real safeguard against their falling upon the village. The old padre did not seem perturbed; he said they were inspected every year, and new cables tied about the stones suspected of being loose.

The trail led upward at a forty-five degree angle, more steeply in places. An iron pipe led to a creek from which the village water supply came, and we clung to this as we climbed the steep hillside. Crowning all, high above the village, was a large, life-sized bronze statue of Christ, placed by Father Hubbard with the help of the natives the previous summer. It looked to the south over the Bering Sea. To its back was the Bering Strait and the entrance to the Arctic Ocean; to the east

50 miles, the white rugged outline of the coast mountains of the Seward Peninsula was etched upon the horizon. West over the horizon was Siberia. All about and below the statue were graves, indicating that it was an ancient burial ground. Bones protruded from rotting boxes. Some were partially covered with stones; others lay scattered upon the tundra. Below this was the intake for the village water supply.

Children and dogs scampered among the rocks. They seemed glad to be home again. Many of the dogs had remained on the island, and were glad to have their masters back.

Thousands of birds nested on the rugged cliffs at the top of the island. The natives lived on these birds and the eggs for a season. They shot them with guns. (On some of the islands, the Diomedes in particular, firearms were forbidden.) The eggs matured rapidly, so in order to assure themselves of fresh ones daily, the King Islanders destroyed all they could find, and thereafter gathered the remainder daily.

Each year, in May or June, the entire village got into their skin boats, the teacher and priest included, and set out for Nome across the long stretch of open water. They always arrived safely. Each year the Coast Guard cutter returned them to their homes in the fall. Their ivory sales alone netted them $8,000 annually. They appeared quite prosperous, and seemed terribly pampered and spoiled.

We descended to the village again, and as we crossed the school porch on our way to the boat, one of the teachers, Mrs. Cameron, was in the process of removing the remains of a dead dog from her front porch. She had wound a mask of cheesecloth over her face, and seemed none too happy. As we departed she yelled: "If you see that big butter-and-egg husband of mine, tell him to come home." We found him still visiting on the boat.

On board ship they continued to unload supplies until midafternoon, when a skin boat with about 20 natives pulled away. The people in the boat raised their hands and shouted an "au revoir." The ship's whistle blew, echoing from the rocky cliffs, and we waved goodbye to the King Islanders.

The day had been the most beautiful we had seen for a long time. Soon clouds filled the sky and snow began to fall, shutting the island from view. We were bound for Teller, where we expected to load more reindeer. The ship began to roll, so the crew busied itself and fastened all loose articles and furniture. I found the steward throwing water on the tablecloth, his way of making the dishes stay in place.

We arrived at Teller during the night, and anchored beside the *Boxer*. Next morning we went ashore. The reindeer were not ready; the herd had not been located, and it was supposed to take several days before they would be corraled.

We were to load 1,000 deer, and our cargo at this port would have a value of $5,000. It was estimated there were about 300,000 reindeer in Alaska, half of which belonged to the whites, who had come to the conclusion the reindeer business would never be a profitable one. There was a movement on foot to sell all the deer to the government.

While we waited for the deer, the crew took advantage of the good weather and painted the ship's hull. They were in no hurry at all; they were anxious to make the trip last as long as possible, for when they reached Seattle they would be off the ship's payroll, and jobs were not to be had.

The passengers took up bridge to pass the time, and the game went on day after day. There was nothing to indicate that we were to get away soon. Our own chief reason for hurry was because of our winter supply of food that lay on the dock at Bethel. Mr. Nichols, the teacher who came aboard at Kivalina, found that he had been on board the ship 18 days, and was only 128 miles from the village he had started from.

The captain still cautioned the passengers to save every drop of water. No more washing of any kind was to be tolerated, he declared. Even so our month's supply lasted but 20 days. Our ship moved from Teller and anchored beside the graveyard for a fresh supply of water. The captain gave orders to all on board: "No one may have a bath or wash clothing. The boat is not for passengers; they do not have to ride it. Hereafter, anyone getting on with a baby must have a plentiful supply of disposable diapers." On and on he grumped throughout the morning.

The ship's tanks were filled, and to our surprise, someone placed a shower head in our stateroom, and we were permitted to take the first shower we had during the 29 days we had been on board.

We went into Teller again for reindeer, and this time we all went to the Lowman cold storage plant where they were killing the deer. No one slept well that night, and everyone would just as soon have passed up that excursion because each deer was killed by a knife stab in the neck and was left to struggle until it bled to death. The Eskimo children stood about chewing on the fat or raw bones of the deer, which they appeared to relish. To them it was a welcome treat. It was mid-October when we loaded the meat and prepared to leave Teller.

There were several native girls aboard ship enroute to a government school for native students who had completed the eighth grade. Nearly every stop added to their number. One night they had a party in their staterooms instead of having Sunday dinner, eating marrow from the frozen shinbones of the deer. One girl held up a sack of deer tallow for me to admire just as proudly as a lady in the States would a beautiful box of candy.

Our ship had a public health nurse who chaperoned the students. Her position was recently created especially for the benefit of the native girls who were annually carried to school by ship. The Department of the Interior apparently found the girls had not been well supervised. Apparently this precaution was well-taken, for the ship's crew included only men.

The wind arose during the night, and by dawn it was blowing a gale 40 to 50 knots an hour. The ocean was shallow, only 25 feet deep, although we were two or three miles offshore, and the sea was kicking up beautifully. We moved further out for safety, and later in the day moved again. This time we anchored about a mile from the beach at Cape Prince of Wales, the westermost tip of Alaska. The surf was running high from the north and the wind was from the southeast, making the sea very choppy. The village lay at the foot of a rocky cliff, which was shrouded in snow and fog. A sandspit extended westward into the sea, the furthermost bit of mainland in North America.

I went ashore in a skin boat with about ten natives. We maneuvered first right, then left, zigzagging onto the sandy beach, riding the swells. Finally, the natives jumped out while the boat was still 100 feet offshore, and pulled it onto the sand, which was littered with sea urchins, clam and spiral shells, hermit crabs, starfish and jellyfish, all cast up by the recent storms. The village dogs were feeding on the crustaceans. There were many natives on the beach busy with lightering the village supplies. Only their skin boats were used for this.

I called upon the teachers, who were recent arrivals. They introduced me to a woman who was the village missionary. Their school building (which was one room of their living quarters) appeared rickety, old and dark. The teachers, accustomed to teaching in the States, did not appear altogether happy or enthused with their lot. They told me their salaries had been increased from $1,620 to $1,800 a year. Just then they weren't certain they had benefitted by their move, since their living quarters back home had cost them $15 monthly and here they were being charged $40.

Our return trip to the ship was most exciting. The engine was barely able to get us through the surf, and one of the men had to steer from the prow by means of a long sweep. At times two-thirds of the umiak was out of the water, and it fell with a loud thud upon the waves. I wondered that it was not crushed. We zigzagged to miss the protruding rocks and the wilder surf, and kept under the lee of the cliff until opposite the *North Star,* then headed for her. As we neared the ship our motor coughed and died. All seized paddles and tried to right the boat from the trough it had slipped into, and finally we got its prow into the wind and maneuvered until we were near the ship's side. A rope was tossed from the deck above us, but it fell short and we drifted rapidly toward the open sea. Another line came near and I succeeded in catching it, and we were pulled nearer the ship. I held my breath, fearing the small rope would part. Finally we slid along the side, creeping up behind another skin boat that reared and plunged with each wave. Its outboard motor was fastened to the stern, and as the bow of our boat came near it looked as if, when we reared into the air, we might come down on it. All hands worked desperately to keep afloat. Finally we were alongside the ship's Jacob's ladder, and once I had it in my grasp I did not turn it loose. I scrambled to the deck above while the natives shouted excitedly, trying to get their boats headed for the village again, but the two skin boats tangled and the ship's launch had to be put overboard to tow them back; even then, they had to take one at a time. Meantime, the storm became worse by the minute, and we lost no time in getting away.

My family took to their beds while we passed Fairway Rock, and then moved along the international boundary line between the two Diomedes, where we anchored before the village of the small American island—the larger one belongs to Russia. The islands, volcanic cones jutting out of the water, are separated by three miles of sea; they gave us much-needed shelter. However, we found it still too rough, so the ship moved to anchor again close by Big Diomede, and spent the night in Russian territory. We left the waters of the Little Diomede on October 21st; in the lee of Big Diomede, across the international date line, it was October 22nd.

In the morning we returned to Little Diomede and unloaded supplies for the Lutheran minister and the schoolteacher. The superintendent of arts and crafts objected to others than himself and the doctor and nurse going ashore. The village on the south side of the island had a population of 135, plus a schoolteacher and his wife, the Lutheran minister and his wife, and a Catholic priest.

The teacher preferred not to look after the sick, leaving this to the missionaries. I inspected the medical supplies, and found they consisted of one gallon of castor oil. In the village I noted there were many with active tuberculosis, and learned that here, as elsewhere in Alaska, this was the chief cause of the Eskimos' deaths.

The houses were small and consisted of an outer and inner room. The doors were about 18 by 24 inches in size. Inside the smaller livingroom was a flat pan, usually 11 by 18 inches, filled with seal oil and a rag wick. Over this was a teakettle. No other furniture was included in the room, and there was no other method of heating or lighting.

There was a stone-paved road winding through the village, which continued along one side of the mountain leading nowhere, and ended at a cliff wall. This, I learned, was the result of the islanders' W.P.A. work relief.

Little Diomede Island is about one and a half miles in length, and Big Diomede about three miles. The only residents on Big Diomede were Eskimos, and they were friendly with those of the Little Diomede. Both groups spoke the same dialect, and had always visited each other until a time shortly before our visit, when those on the Russian-controlled island were forbidden to leave. Then the natives of Little Diomede were afraid to call for fear of being retained. Both believed creation had begun there, and for that reason none wanted to leave their homeland. The natives did beautiful ivory carving, which was much sought after.

During the night, the ice pack approached. As we prepared to leave, it began touching the islands. It proved to be "young ice," formed of balls of slush and snow, sometimes called "pancake ice," as it appears to be thousands of large pancakes floating on the water. The ship had no difficulty in passing through it.

There was more snow on the mountains above the village, and the fog had settled down on the lowland. It began to snow, and we hurried away. However, we could see the ice to the west and knew that the ice pack was not far away. When the fog lifted, as it occasionally did, we clearly saw the white mountains of Siberia along the western horizon.

We passed through large pods of whales. Sometimes we would see four or five spouting at one time. We drew near the island of St. Lawrence, and anchored near the village of Gambell on the island's westermost extremity, Chibukak Point. The island is mountainous, but at this westward end there was a low sandspit, and the village was built on it. In front of the school a flag was waving, the first one we had seen since we left Wainwright. The villagers, in a fleet of umiaks, came to meet us even before our anchor was down, the first time we had seen that happen. I went ashore with the first skin boat, and while the sea appeared quite calm, large swells carried us high. Skin ropes were thrown from both stem and stern of the boat, and the people gathered on shore caught the lines and carried us on the crest of a swell far up on the beach, where the boat landed sidewise.

The villagers were there with the schoolteachers to greet us. I recognized one of the latter as one of those who had left Barrow with our arrival (the man who had been sent from Barrow because of his fistfight with the doctor, and who had later been vindicated and reinstated). He was very happy in his new village, and showed me around. I was sorry that our stay there was so short.

The village was the most prosperous looking we had seen. The native houses were unique. They were built to resemble haystacks, like those I recalled seeing in my geography classes of the inhabitants of the Siberian tundra. Inside, the houses had a large rectangular room with a partition making an outer and an inner room. The upper half of the partition was made of wood, the lower of canvas. The outer room was used as a play and storeroom. Lifting the canvas, one came into the livingroom, which was better furnished than any I had seen.

I inquired as to the origin of this type of house, and was told there was a constant migration of natives from Siberia; one family arrived only 12 years before, and some of the older residents remembered others. New arrivals were accepted with great caution, and only the better families were permitted to remain. I realized these buildings were of Asian design, and that here was an answer to the origin of the Alaskan Eskimo as well as to the change in dialects in the villages farther up and down the coast.

The village was composed of 250 persons, 12 of whom had active tuberculosis. How many others were in the arrested stage, I could only guess. Their revenue came from hunting fur animals of the island, and whale and seal plentifully available in the nearby waters. They also had modernized their ivory carving by installing a machine shop, where they had a commercial production line.

We were not allowed to stay long. The captain was impatiently sounding the ship's whistle, and I caught the last boat back to the ship. Shortly we were on our way toward the east end of the island, and we anchored along the north side before the village of Savoonga. This village was also very prosperous, having even better buildings than Gambell. There was a population of 205, seven with active tuberculosis. They lived by hunting, fishing and ivory carving. This last seemed the best I had seen; their ivory was older and richer in color because they obtained a great deal by digging it from the earth. The appearance of the womens' dress was most unusual here; the hair styles were especially attractive and different. We did not hesitate there long; in fact, our stay was much too short. I found this village a very interesting place.

The ship moved at full speed except when soundings showed that we were in shallow water. The wind rose and grew to storm proportions. Our little wooden ship bobbed like a cork, and we landlubbers were glad when we saw the mountainous coast and recognized Cape Newenham, south and beyond the mouth of the Kuskokwim River, our destination. We drew near the sheltering rocky cliff inch by inch, it seemed. We crawled at snail's pace past one small bay and into another. The rock wall towered ahead and on either side; then the anchor was dropped and we lay riding out the storm.

This, we now realized, was the reason for the haste of the past days. The barometer had fallen very rapidly during the night, which accounted for our running for shelter rather than risking riding the storm out on the shallow sea. All day and night we kept to our cabin. The wind struck with explosive violence in gusts so hard it lifted the water from the ocean in clouds and dashed it this way and that in the air. The wind reached a velocity of 80 then 100 miles an hour. These the sailors denounced as the Wooley-Walleys, the winds we had heard described at King Island.

The family was still seasick, when on the third day the wind abated somewhat, though the sea was still rough and our boat rolled mercilessly. We were surprised to hear the ship's bell clang and hear the anchor coming up. The engines started and we slowly turned and moved out to sea. We anticipated a stormy time on the shallow open water, but as we drew away from the shore the wind decreased and the sea became choppy.

Then a warm sun shone overhead and the day became beautiful. We rounded Cape Newenham, and before noon were anchored off Goodnews Bay. We were still seven miles from shore. I paid our passage to the purser and bade goodbye to the passengers and crew. The ship's launch was dropped over the side, and we went over the *North Star's* Jacob's ladder for the last time. Captain Witham, Mate Lysted, the chief engineer, and two seamen were in the launch. The little motor roared and we drew away from the ship, waving farewells. Those on board waved and shouted, but long blasts from the ship's whistle drowned them out. That ended our seven weeks' stay on the *North Star*.

The bronze statue of Christ that stands atop King Island was placed in 1937 on a spot commanding a view of the Alaska Range, the Arctic Ocean and Bering Strait.

Platinum

It was a long way to the spit at Goodnews, but at last the launch reached that bit of land protruding out into the Bering Sea. Some natives came down to the beach and helped us ashore with our belongings. We said farewell to the captain and the crew, who were in a hurry to be away. They headed their launch westward toward a speck on the horizon that was the *North Star*, and were lost from view. Since we were a mile or two from the village of Goodnews, we bargained with one of the natives to take us in his boat, first moving our baggage up on the beach safely above high tide.

The native's boat was narrow and old, but happily was powered with an outboard motor. The beach was crusted with ice, and as we proceeded up sheltered Goodnews Bay the ice covered the water farther and farther from shore. Finally we could go no farther, and were obliged to get out and wade to shore, Virginia and I carrying the children on our backs.

Now and again we stopped to admire a gorgeous sunset. The salt air was as crisp as the ground underfoot. The mountains to the east and south were snow-covered, and added to the beautiful sight. We stood admiring, but only for a few moments, for the babies grew restless and we were reminded we must get on. The beach was so thickly coated with ice that we found it too slippery for safety, so we had to step from the tufted top of one grassy hillock to another. Sometimes we slipped and fell, for it was much like walking on fence posts topped with short curly grass. After a time we came to ground plowed into deep ruts by heavy machinery, and here many oil barrels littered the way. A dragline was operating just ahead, and beyond this were several newly-erected buildings. This was a new Platinum.

The village was full of miners. The freezing weather had closed mining camps everywhere, and the miners swarmed down from the hills. All the roadhouses were filled to capacity, so we rested at the largest while making further inquiries about the housing situation. Our presence soon was known to all the village. One man who had a room in this roadhouse volunteered to give it to us, which we accepted gladly when he assured us he would be able to stay with a friend. The room was just large enough for an old-fashioned iron double bed with sagging springs and bedding as clammy as the room (such dampness was common to oceanfront houses), but to us the room was heaven-sent, and we were thankful to our benefactor.

The village had grown since my first visit there three years before. Then there had been one store, operated by Einer Olsen for the trader Pete Wold, and one or two other small buildings. This time we saw another store, many small dwellings, a post office, restaurant, gambling hall, and a village of tents (many of which were running gambling games) pitched on every available space. It was a wide-open, wild and wooly frontier town filled with men out of the mines for the first time after a summer of hard labor—and most of them were celebrating.

Gambling went on day and night while the miners waited for planes to take them "outside." Some of the companies had paid off in large checks, giving the men only sufficient small change to pay board and plane fare, thus hoping to prevent them from losing all their earnings to professional gamblers. There were many of the latter, for in Alaska this was an honorable profession, and men announced themselves as such. Those I became acquainted with during my stay were of more than pleasing appearance and personality, and certainly not the villainous persons I had always seen portrayed.

The excitement of the roaring mining village did not keep us from remembering the work ahead, recalling that while at Barrow we had been told by the medical director that we would most likely have to live at Akiak because there was no vacant house at Bethel. We arranged to have our food sent on to Akiak hoping to get it there by boat before the freeze-up; afterward it would be more difficult to do so, with a greater risk of having it frozen. We advertised, as was the service regulation, for bids for a plane to take us from Goodnews to Akiak, and accepted an offer of the Star Air Lines; then we waited.

One day we visited the Goodnews Bay Mining camp. It was quite a village in itself, having 40 or 50 houses for the employees and a large mess house. For miles the ground on either side of the creek looked as if it had been plowed into furrows by some giant plow. At the end of one of these rows of dirt and rock was a dredge, resembling nothing so much as a big old duck huddled in a little puddle of water, scooping up with her mouth—in this case an endless row of iron buckets—the earth, which disappeared into her body, while on the opposite side the mass of earth and rocks spewed out behind her; all this to such a din that we shouted at the top of our voices to converse. That one dredge alone had taken out more than a million dollars worth of platinum annually.

Residents also pointed with pride to the new road between the mine and the village; there were 12 miles of graveled surface. While the Bureau of Public Roads had estimated the cost of building the road at $50,000 to $60,000, the mining company had offered to give $5,000, and asked the Bureau of Public Roads to give a like amount, and they built the road themselves at a cost somewhat under $10,000.

Days passed, and still we remained at Platinum. The wind blew and the sky filled with clouds, and for a time planes would not venture in to land. Such weather often prevented flying for weeks. By day and night the miners drank and gambled. We had the children to care for, so were pretty well confined. Since we had no way of washing, all our clothing was soiled and there was nothing we could do about it. The village offered little for us to do, and beyond was only the long, level beach covered with snow and ice. Sometimes we wandered near the water and picked up hundreds of small glass floats that had been lost from Japanese fishing nets.

The days wore on and we began to tire of Platinum. We longed for a place to call home, where we could wash our dirty linen and have a separate bed for the children. One day a plane did arrive, but we found it was not for us, and four or five miners got into it and left the village. Other planes came and left, and more men came from the hills to take the places of those who had gone. A Star plane came, but it was not for us. Since we were charter passengers, we had to wait. The men must go first. We didn't blame the pilots; their planes loaded for Anchorage at $80 to $100 per fare, made them more money than the shorter trip to Bethel.

At last our patience was exhausted, for day after day we saw plane after plane come and go. Finally, upon the arrival of more Star planes, I became insistent they take us to Bethel. I agreed to forget the government charter, and paid regular fares. We crowded into a plane, and within an hour and a half were circling a mile above Bethel's row of unpainted houses on the riverbank. Our plane settled not on the familiar sandy riverbank but on a new graded and graveled runway. We were happy; we were home again, almost. We would be at Akiak soon, and we would fall into the old routine. We had no more desire to live elsewhere, or ever to return to the States "outside."

Return to Bethel

There were five planes tied along the runway, a lot of planes to us, and Bethel's future appeared bright. Already there was talk of its becoming a link with the Orient. The wide Kuskokwim River and its bay offered a natural field for aircraft, and there was none so good either north or south on the Bering Sea.

There were other changes. There was a road from the airport to the village and a small Ford truck came to a skidding stop beside the plane. Our baggage was placed on it and we climbed into the cab and were driven to the roadhouse. Although crowded, they gave us a room and a bed.

Bethel now boasted a movie house, too. A storeroom at the Northern Commercial store had been cleared out and each Saturday night the villagers saw a motion picture. The boat had brought 50 or 60 complete shows, and these would serve until the following year. Each time a movie started the doors to the room were closed tightly to insure darkness. Three 10-inch diameter holes along the outer wall allowed for ventilation. Inside the closed room everyone coughed, for all smoked during the show. At the end of the show everyone had a headache, which disappeared after the doors were opened and fresh air came in.

After the movie the crowd filed out and milled around in the village store while the storekeeper's wife sold ice cream. She made five gallons each night and this sold quickly. There was a liquor section in the store, one of five in the village, and it did a good business. At midnight the floor was cleared of the chairs, the phonograph played and the dancing began. The dance lasted until everyone tired, which was usually near daylight. The white women dressed in evening gowns and mukluks. The natives wore their best parkas. And everyone shuffled about in one happy throng.

I called at the radio station and found two wires from our medical director which had arrived days before. The first stated I had been very negligent in not reporting my arrival in Bethel; the other said I had exceeded my authority by ordering an electrical generator from Seattle. A third wire arrived and this commanded us to remain in Bethel.

I wired a reply immediately, explaining that we had arrived in Bethel only that day. I informed him I had ordered at my own expense a small electrical generator for our radio privately from a firm in Seattle. To the third wire I replied we had found Bethel as he had earlier, to have no vacant houses; also, that our year's supply of food had been sent to Akiak and that the Kuskokwim had frozen over so that river transportation for the year had ceased.

We combed the village unsuccessfully for a house; the cost of living at the roadhouse far exceeded my salary. The medical director suggested we purchase the house occupied by the village nurse, but she not only occupied it but asked an exorbitant sum for it. Then he insisted we could get an old trading post occupied by two men who were "baching." Eventually we came to terms with the bachelors. We paid a good rental for the building and, in addition, were required to furnish fuel, room, board and laundry for the two of them.

The house had a large room at the water's edge, with a second story divided into a livingroom and two bedrooms. There was no plumbing and we carried water from the river. There was no electrical power, so washing was by hand—with a washboard—and we had to use coal oil lamps and gasoline lanterns. Our heat was from a home-made stove in the store building below, with the stovepipe running through the room above, and for fuel we had to purchase black spruce wood the natives brought. Since we had to bake bread as well as cook all that we ate, we had to have a stove. I was fortunate in finding a second-hand one, and this we installed in our combination livingroom and kitchen.

We lost no time in moving in. Meantime, in Akiak, we had our supplies watched and a fire had been kept to prevent their freezing. We began bringing them back, first by plane, then by dogsled. There were six tons in all, and it was rapidly becoming about the most expensive food anywhere; not only had we paid the freight from Seattle to Bethel—the highest tidewater rate in the world ($40 per ton)—but we also paid $10 per ton to take it to Akiak, paid for a man to keep fires in the house where it was stored, and paid $50 a ton to have it brought back to Bethel. The weather really grew cold and our fuel bill mounted and mounted. We were paying more than $100 a month for the wet and green black spruce pole fuel alone.

As days went on, snow piled over our house, making the top of the house level with the landscape of the village. The snow blew over the tundra and filled the doorway, and I was obliged to shovel for an hour or more each morning and evening. At last I made a snow tunnel far out on the tundra, perhaps 30 feet from the door, just as the natives did, and the entrance then remained clear. We were settled for the winter, none too happily perhaps, for our living conditions were almost on a par with those of the natives—but we were glad to be again on the Kuskokwim, and looked to the coming summer. We had each other and our family, so lived quite happily.

That winter we found Bethel had one other new thing: a dog house. It was a deluxe model, ample in size, and evidently intended for a large and expensive dog. In Bethel everyone seemed to know the goings-on, for when one of the village men got into disfavor with his wife he was certain to find the dog house at his front doorstep the next morning.

While Virginia and I got along agreeably, we considered the events following our arrival in Bethel almost entitled us to a title to the deluxe dog house.

Mine owner Dave Stranberg with a burlap sack filled with a half million dollars worth of platinum.

Medical Routine

While we were staying at the roadhouse we had a small room with a double bed for the four of us, so when the radio operator, who also had two small children, suggested they keep our children we accepted their kind offer. Two days later we observed that one of their children had whooping cough. I wired for vaccine from Juneau and upon its arrival, immunized the ones not ill. Just then word came that several children in the vicinity of Platinum and the lower Kuskokwim villages were ill and some had died.

The village nurse and I gave all the vaccine and wired for more, explaining the situation. We received only a scant supply, not nearly as much as needed, with the admonition: "Pertussis vaccine is for cure, not prevention, of the disease." After I sent several wires requesting more vaccine, I referred to the medical literature about the vaccine's use for the prevention of the disease, and we finally succeeded in getting a quantity sufficient to immunize the villages in the path of the epidemic. We lost no time in administering it, but not before more than a hundred deaths had occurred.

Part of the blame for the deaths lay with the natives, however. In one house I found three children, two of whom had pneumonia. I gave medicine and directions for their care, which included keeping the children warm. Next morning I found both children entirely naked and was informed it was the way of keeping them indoors. Since it was against Eskimo policy to command children, this method was used to confine them to the house. Both children died, and the third was prevented from the same fate only because the Mission ladies, the nurse and I stood over him.

No sooner had whooping cough subsided than we began to hear of an epidemic of measles coming down from the vicinity of McGrath and the upper Yukon. Hundreds of children died, not necessarily from measles but from pneumonia, the most usual complication. Reports of illnesses came day by day, first from the tundra, then from upriver.

Meningitis was the most feared disease of all, since it had prevailed for several years and had taken so many children. When there was suspicion of this dreaded killer the natives lost no time in reporting it. One day two native men knocked on our door, and when Virginia opened the door they walked in. They announced there was meningitis in their homes in a downriver village, and, when told that I was away, sat down beside the stove to await my return; Virginia could not get them to leave.

The winter brought an outbreak of cerebro-spinal fever. But this time I had a new drug, sulfathiazole. I gave it to all who had the disease, unless they had reached the stage of terrible head pain and vomiting. Then I used the serum. I found that giving sulfa to all those who had been exposed prevented their contracting it. None who followed this method became ill so far as I was able to determine.

One day the village Quithlook reported they had one ill, presumably with cerebro-spinal fever, so I procured a plane and was soon over the village. We were unable to land, so I filled a bottle with sulfa tablets and wrapped it well with a piece of cloth. I wrote explicit directions for administering the drug, then, swooping low before the village, dropped the package. Apparently all went well for there was no further call for medical attention.

I dreaded these attacks of cerebro-spinal fever, for I saw and treated those sick with it. I knew I had no special immunity to the disease and that I was no superman. Often I was very tired, too; during one of these epidemics I frequently traveled a hundred miles daily with dogs for as many as ten consecutive days. I tried to avoid contact with those who were well, for the infection was readily carried by a person in my capacity. Following a known exposure, I slept in my sleeping bag in the dispensary, or an igloo, or even a snowbank, as occasion dictated, for the ten-day quarantine.

By this time we were expecting the stork any day; in fact, he was overdue. Much as I wished to be near Virginia, now that she needed me so, I was constantly required to make trips distant from the village and was never certain of my return. A wire from the medical director ordered me to take over the hospital at Nushagak. I replied that our baby was due any day, and that my going to Nushagak meant leaving my wife with the closest hospital or doctor 600 miles away. He did not insist that I go.

One night I received a wire from Juneau directing me to charter a plane and go to Stony River, a small village 200 miles upriver where a native was seriously ill. The following morning, with Jack Peck as my pilot, I proceeded to Stony River where I found an Eskimo whose illness was insanity. The Eskimos said she was violent and that they were afraid of her, and all thought it best that we take her to the hospital at Mountain Village. The patient did not wish to go, but eventually we got her into the plane where she sat between the pilot and me. At the last moment I was requested to see a white girl, the daughter of the village trader. She had a toothache and I saw that it was a molar that had broken off level with the gums, the result of her brother's attempt to extract the tooth with a pair of pliers. I had no dental equipment with me so had to leave her with the aching tooth. (Later that week she arrived in Bethel with the mail plane and I removed the offending tooth.)

As we took to the air our passenger (who, in addition to being a young woman, was large and strong) became excited. She began screaming and fighting and I restrained her, fearing she would throw her arms around the pilot, grab the controls and damage the plane. For a time it was all I could do to restrain her and the outcome of our struggle seemed in doubt. Finally I succeeded in getting a headlock on her. The pilot put the plane into a steep climb. Soon we were in the rough, upper air currents, where we were tossed about. To my relief the woman became airsick and I was able to relax my hold somewhat. We arrived at the Mountain Village hospital without further trouble.

Two weeks later our patient arrived in Bethel. Because the doctor in the Mountain Village hospital could do nothing with her, he placed her on the first available plane to Bethel, as she had relatives there and he thought she might live with them. Soon the relatives complained they feared she would kill them and she was placed in the village jail. There was a jury trial before the United States commissioner and she was pronounced insane and ordered committed to Morningside Hospital in Portland, Oregon. The marshal took her to the hospital in Fairbanks, but that was as far as she got. She went on a hunger strike and died there.

I saw one thing new while in Bethel—hysteria in a native. I answered an emergency call to find a young woman lying on the ground. A group of excited persons stood about her and a teenage girl was kneeling and breathing into the fallen girl's mouth. I was told the woman was subject to such attacks and the younger sister was her constant attendant, and gave artificial respiration in this manner each time. I gathered, from the information they gave me, the attacks only occurred when the little sister was nearby. I was unable to determine if these attacks were hysteria or epilepsy, so I examined the unconscious woman, detecting no abnormality of the heart or lungs. I felt most certain now that she did not have epilepsy. To restore her to consciousness I got a bottle of Tr. Capsicum, an extract of red pepper, and gave her a fair dose by placing a few drops of the liquid fire on her tongue, explaining to those present that all that was needed was to repeat the dose every few minutes until she regained consciousness. One dose was sufficient, for as I prepared the second (demonstrating the dosage and method to all those assembled), she revived completely.

A call came from the teacher at Kipnuk on the Bering Sea, saying a boy had been accidently shot and they wanted me to come. The boy would be brought to Kipnuk by morning, so I persuaded Jack Peck to postpone a trip already planned and take me to see the native instead.

We started at daylight and followed the Kuskokwim to Kwigillingok, then went along the coast westward. Snow covered everything and there was no twig, brush nor anything dark showing through the white covering. The sky was gray with overhead clouds hiding the sun and there was nothing to guide us after we left the Kuskokwim unless we could follow the shoreline. Jack said it was easy to fly into the ground in such circumstances. Once we found ourselves out over the ice pack, and later snow squalls closed in, but luckily we saw at last a tiny black dot to the northeast and flew toward it. Soon we identified the school building. A church and parsonage had been added since my last visit. We landed just as the storm blotted out all visibility. The child was not yet in the village, so during our wait we became acquainted with the Millers, who were the teachers there. They were a cheerful young couple who had two daughters, eight and six years of age. We expected to have a long stay with them, but toward noon the natives arrived with the boy. I found the wound did not involve anything vital and was not serious, so cleaned it and gave the boy tetanus antitoxin and instructions for his care. I thought it unlikely infection would develop as the temperature was not conducive to bacterial growth. All were glad he did not need hospitalization. The natives went their way and we returned to the Millers' warm livingroom.

About mid-afternoon it stopped snowing and the sky began to clear. Jack Peck and I hurried out and placed a firepot under the engine and soon we were able to turn the propeller with ease. When the weather took a turn for the worse and a snow squall threatened to close in upon us, we threw caution to the wind, and with all haste rolled up the canvas that had sheltered the engine and placed it in the plane; and took the ropes from the wings. Jack pressed the starter, the engine was permitted to warm a short minute, then the brakes were released and we headed into the wind. Our course was away from the ocean and, as we reckoned, toward Kwigillingok. In the air we opened the windows and both watched downward for shadows we never saw. We felt relieved when we sighted the Kuskokwim Mountains on the horizon to the eastward. With those to guide us we found the Kuskokwim River and followed it upstream, dodging numerous snow squalls; soon we were home again.

Word came that the physician in charge of the Mountain Village hospital on the lower Yukon River had resigned and I was directed to look after his territory as well as mine. I went at once to see the hospital patients. I found Jack busily overhauling one of his planes and asked him if he would fly me. It was quite late in the day so we made haste. Taking a ship equipped with pontoons, we headed upriver in order to avoid flying blind over the wide expanse of treeless white waste to our north. Further upriver the Kuskokwim and Yukon rivers are near to each other and Jack used the high mountains beside the Yukon as a guide. Once on the Yukon River, we followed it seaward for 150 miles by sight of the reflecting waters below, until the lights of the village told us we were there. It was a very dark night but the river was wide, possibly four miles. Jack felt his way down, hoping to avoid the many sandbars. We were relieved when finally the pontoons struck the water, and more so when the plane was safely moored and we were on shore.

I remained in Mountain Village for several days. I took a plane enroute to Bethel (by way of Holy Cross), and stopped at Marshall and other small villages along the Yukon River, wherever there were sick people needing care. At Holy Cross we found Father Meinjou (whom we had once met at Kotzebue) in charge of the orphanage. There were between 150 and 200 children ranging from four to eighteen years in age, who were cared for by a large staff of Roman Catholic sisters. I was shown from building to building and examined all the children. They were in remarkably good health. I found nothing worse than a cold among them. Afterward we had lunch of bread, butter and milk, products of their farms, and a slice of watermelon, which had been flown in from the States. I concluded Holy Cross was one of the nicest places I had ever seen.

We took off for Bethel. As we approached the Kuskokwim River I saw what I took to be a native paddling a kayak. Coming closer I saw that it was a large moose swimming in one of the lagoons beside the Kuskokwim. I regretted I had forgotten to bring my rifle, for it was the hunting season and that fellow represented a lot of meat.

A few days later I heard that Mountain Village had a new doctor. Still later, I received a very carefully worded wire from the Juneau office directing me to proceed to Mountain Village and, as diplomatically as possible, determine if the new doctor was insane. If he was, I was to bring him out. As soon as the plane landed I went directly to the hospital and was met by a nurse whom I had never seen before. She explained that she had come from Juneau to "inspect" the hospital, had been there for several days and it was her opinion the doctor in charge at Mountain Village was "rather queer." She told me all that had transpired to make her come to this conclusion; then I was introduced to the doctor himself, and we were left alone. To me this newly arrived doctor appeared very normal. He was young, of excellent appearance, and I could detect nothing odd about him, though we talked for a long time. Since he was new to Alaska he had not yet acquired the usual vocabulary or knowledge of local things, but spoke of things more common to those accustomed to hospital practice back in the States. I suspected he was rather shocked at the primitiveness he had been suddenly thrust into and was, perhaps, a bit homesick. In time we talked of those with whom he was working and he confided they thought him a little "screwy" but that he really was not as bad as they indicated. I thought him congenial, bright and cooperative.

Afterward I talked to the "inspecting" nurse and found her still of the opinion the doctor was "balmy." During the night I gave the problem more thought and again in the morning interviewed him. He was again congenial and cooperative. Also, he was willing to leave with me and he was ready with suitcase and baggage when the plane came for me. We returned to Bethel where he was able to catch another plane to Juneau; from there he was sent on to the States. Personally, I considered him the sanest one of us all. The conclusion was that he outsmarted someone and got his fare paid to Alaska and back to the States, because of his mental state. Ordinarily he would have had to stay at least one year to have the service pay his way out again.

The health and sanitation of Bethel had not improved during our stay in Barrow and I sought ways of bettering it. Garbage was dumped at the doorstep or, at best, piled on the ice. I sought a way of interesting the residents in a cooperative attempt to clean up. Accordingly, I called a meeting at the schoolhouse. Most everyone came and I proceeded to point out the unsanitary condition of the village and to ask for improvement.

We divided the village along natural lines: the Mission section, the Northern Commercial Company part and a third—the part none of the others claimed—which was the other end of the village from the Mission. We decided we would attempt to follow the rules as laid down by the Territorial Board of Health, then elected a person to supervise each district. It was not long before it became evident only part of the village cared to cooperate. Mostly, things went on just as before. The people of the roadhouse nearest the river had for a long time thrown their garbage onto the riverbank, and they continued to do so. We could not legally enforce the law, because we had no power to do so.

I was called to see a little child seriously ill with a mastoid infection. The weather was so bad a plane could not get into the air, and hospitalization was therefore out of the question. Yet only immediate surgical intervention could save him, so I used a little novocain (though it could but partially block the pain), and with mother holding the child's head firmly, incised the abscess, scraped the rotting bone away, all the time hoping and praying I could avoid the large blood vessels so near the incision. To my surprise, the child made a rapid recovery. One contributing feature, I concluded, was the cold temperature, which made bacterial growth impossible. Even the little fellow's home environment had been sterilized by it.

We were still expecting a new arrival, and Virginia had been quite ill on several occasions. I continued to be called here and there about my district and began to grow very uneasy, for I needed to be near home. I was therefore downright provoked when a native came for me and demanded I go to the tundra. He thought perhaps meningitis was breaking out. The weather had been bad for days, and that morning the clouds appeared to lie on the ground and fine snow, driven by a hard wind, filled the air and cut one's cheeks and blinded the eyes. The village nurse added her voice to that of the native who threatened, "If you don't go, we'll send a report to Washington."

I went to the roadhouse and awoke pilot Leo Moore and tried to persuade him to fly. He was the only one I knew crazy enough to attempt such a thing, but he took one look at the weather and refused. I then got a dog team and started for the tundra, 50 miles away. Since the nurse had been so positive this was an epidemic, I asked her to go along.

"This epidemic may require us both," I counseled her, and she complied protestingly.

Upon reaching the village we found the native ill with a severe cold. I gave him medicine and told those assembled how best to care for him, warning them that failure to care for him properly would probably result in his contracting pneumonia. I thought it best for the nurse to remain, just in case meningitis might break out. She protested, but the natives had heard and they, too, thought it a good idea. I returned to Bethel and, much to my relief, found Virginia feeling somewhat better.

Next day spring officially arrived. Our thermometer stood at 30° below zero and the snow continued to fill the air. Although almost too cold to snow, it drifted with the wind so that our igloo was completely covered, nothing more than a hillock above the surrounding snowscape.

Virginia became ill again and as she grew more and more miserable we began to hope this was the awaited time, and I began to prepare. I moved the bed into the kitchen as near the cookstove as I safely could and stuffed the stove with wood. I heated the water and brought out all the usual instruments and boiled them. The ceiling was covered with frost and the stove's heat began to melt the covering and I had buckets and pans on the bed and elsewhere to catch the dripping water. Wishing I had someone to help me, I was nevertheless as ready as I could ever be. The two babies were underfoot and insisted upon attention. Just then the wife of Jack Peck, the pilot, appeared at the door. She had come for medical attention but, before she could complain, I thrust Paul and Virginia Lee into her arms and asked her to take care of them and send any woman she could find to my aid.

I will always believe my guardian angel hovered over me then. The expected infant arrived. He weighed eleven pounds two ounces. We named him Jack. Now that Virginia was safe and out of danger I felt as if I were walking on air, and in the storm I threw open the door of McVeigh's roadhouse where the pilots, mechanics and a few of the villagers sat whiling away the time due to the storm-enforced idleness. They thought our arrival called for a celebration, and all joined with far more than usual enthusiasm.

Russian crew at Barrow during search for the Soviet "Lindbergh", Sigismund Levanevsky, lost during a cross-polar flight.

Village Activities

At Bethel I realized an old ambition when I found a boat on my property inventory, and lost no time in locating the riverbank. It was the *Cross Fox*, which had originally been built as a sub-chaser. It was wood, 25 feet in length, and was equipped with a 150-hp Red Wing engine and with fuel tanks for 500 gallons of gasoline. I surveyed it with great pride and satisfaction, dampened somewhat when told the boat had been issued to the Alaska Fish and Game Commission and abandoned by them when they had first used it. They had completely fueled the *Cross Fox* and started upriver to McGrath. A little more than 100 miles on the way she ran out of fuel. So disgusted were they, that they abandoned her—and I found a boat upon my inventory.

When spring came and the ice had gone, I launched it, filled the fuel tanks and in company of pilot Brown, set out for Akiak, 40 miles upriver. We turned up the engine speed and the boat buried its nose into the water. We seemed to to be making good speed until several Eskimos, in poling boats propelled by outboard motors, passed us as if we were standing still.

Arriving at Akiak, we went directly to the schoolhouse and as soon as we sat down we both fell asleep. It was only after consuming several cups of black coffee that we were able to keep awake. Pilot Brown, from the first, had been greatly concerned because there were sparks jumping all over the engine. Now we found that the manifold had no packing and we suspected that our drowsiness was due to monoxide fumes. On our return trip we avoided the cabin, staying up on deck, but it did not add to our peace of mind to know that directly under our feet were 500 gallons of gasoline.

I corrected as many of the boat's shortcomings as I could and continued to use it. On a second trip to Akiak the engine suddenly stopped, and no amount of coaxing would get it to start again. I looked the engine over but could see nothing wrong. I fell to meditating and finally, for want of something better to do, poked a stick into the fuel tank. It was dry! I computed my mileage and found that I had gotten about one mile to three gallons of gasoline.

I became accustomed to being stranded upon sandbars and mud flats, for there were numerous shallow areas and flats along the course of the river and they changed constantly. I would wait, none too patiently, until the tide came in and lifted the boat off again. Sometimes a scow would come along and give me a tow; then I would not have to spend so many hours in silent meditation. I avoided cruising below Bethel for the river grew rapidly wider there and one could easily drift out into the Bering Sea.

During the winter much of my travel was by dog team and I'd gotten so I preferred certain breeds of dogs. I would listen to the natives' and sourdoughs' differences on the subject and, although I knew they all knew more than I, sometimes I would join in the conversation. There was a way to settle the argument, we concluded. Dog racing had long been a favorite winter sport in Alaska. Fairbanks and Nome were famous for their races. We had never heard of one on the Kuskokwim, but the idea struck us as being a good one.

Dentist Braafladt brought us up to date on the races he recalled. (Dentist Braafladt had arrived in Bethel and decided to stay for the winter. He rented a house and set up his office, and his presence considerably enlivened the village.) The races started when Albert Fink suggested the first one at Nome in 1908. We supposed it started in much the same manner as ours had. This first race was nonstop for 408 miles, and was won by John Johnson, with his Siberian team, in 74 hours, 52 minutes and 14 seconds.

Some of the races between 1908 and 1918 were as follows: Al Cary, with his cross of Siberian and Lapland Collie dogs, traveled 11.4 miles in 40 minutes. The Ulba Loop Race of 6.8 miles, winner not recalled, was won in 22 minutes. The Solomon Derby, a 60-mile nonstop race, was won by Fred Ayres in 5 hours and 32 minutes with a team of crossed foxhounds and Malamutes. The Borden Marathon Cup was a 26.33 mile race and was won by Leonard Sepalla in one hour and fifty minutes, with a team of Siberian dogs.

In Fairbanks the first dog derby was held in 1927. This was a 58-mile race and was won by Herbert Lawrence in 5 hours and 25 minutes. Bob Busby won an 80-mile race in 8 hours and 12 minutes, using Siberian dogs. The last race held in Fairbanks was a 31.33-mile daily run for three days; this race was won by John Allen from Cockroach, who made the run in 2 hours and 10 minutes with Malamute dogs. The Ruby to Long race, a distance of about 30 miles, was won by Leonard Sepalla with Siberian dogs, and the All Alaskan Championship from Nome to Golovin, which was 160 miles, was won by Alfred Kigetullik in 15 hours and 13 minutes; a 12-hour compulsory stop was required in the race.

The announcement of THE KUSKOKWIM DOG DERBY got top priority in the shortwave news broadcast, along the grapevine, between travelers and all Alaskans throughout western Alaska. Prizes were announced: $100 for first place; $75 for second place; $50 for third; many smaller prizes were offered.

The main event was from Bethel to Akiak and return, a distance of 56 miles. And, quoting from the announcement:

> Other events are being planned, among which is one to Oscarville and return (ten miles), a race around Cow Island, one for the women with them handling the dogs, and one across the river and back for the children.

The day for the races arrived cold and clear, ideal weather for the dogs and the drivers. Numerically it was a great success, for there were 60 teams entered to run, undoubtedly the largest race ever held in Alaska. With each team numbering seven to nine dogs, there were almost 500 dogs participating. The whole country was represented and there was a stronger incentive than the prize money itself to the native drivers: each was confident he had the best team and was willing to back his opinion with whatever he possessed. Betting on one's favorite was the rule of the day.

I had ridden with many of the drivers, so had my own opinion. I was partial to a team belonging to Moses Jim of Akiak. Perhaps my judgment was influenced by the size and fighting ability of the dogs, for they were Malamutes mixed with wolf (the lead dog was at least quarter wolf and many of the team perhaps more). They were huge, fierce and indefatigable. So I backed Moses Jim. Likewise, I had ridden from Bethel to the tundra with a team of Siberian dogs—small, flea-bitten sorry-looking things—but they had taken me to the tundra and back, a distance of 100 miles, on one stormy day, so I should have had a little more respect for them. Also, I knew the Greenland dogs of Point Barrow and the mousy Siberians there, but I let sentiment rule that day. Dr. Braafladt, an old dog-racer himself, and McVeigh, the roadhouse keeper, were willing to risk their judgment also.

The race started promptly and, judging from the expertness of the starters as well as the whole managing body, it was strictly professional. The teams had numbers and started in order at one-minute intervals, and when they were all on the trail we stood as a great crowd—the natives and the Kuskokwim/Yukon whites. Any argument or expression of preference of teams or drivers was promptly closed by a show of money, and tension was at fever pitch as we gathered at the finish line. We all strained our eyes and necks for a better view of the trail. And, as a murmur began, then shouts, we knew that the lead team had been sighted. We all strained for an even better view, but I saw enough as the assembled throng closed about the winner. It was not Moses Jim and his wolves. It was, instead, the flea-bitten Siberians from the tundra. Loud and long were the laughs of McVeigh and Braafladt as they came to collect their winnings. It was always thus for me, I thought: my education came high. But I consoled myself with the thought there would be another day and another race, and maybe next time I would be lucky. Just as with the old prospectors—and there were thousands of them up there—I would surely hit pay dirt next time. With that, sadder but not wiser, I helped plan the next year's event.

As always, my work gave me a large measure of satisfaction. I had the feeling of being of occasional benefit to humanity, as did my wife, and we found life varied and interesting up there where anything could happen—and usually did. It was still a primitive land and many sought and found adventure there. Some did not fare so well as we. One man with his wife and three children—ages six, four and three months—set out from Fort Yukon in a 14-foot boat and traveled 2,700 miles to Goodnews. They lived by hunting and trapping, stopping here and there at any likely-looking location. One day the man failed to return from the trap line. His wife went in search and found him helpless with both feet frozen. She placed him upon the sled and mushed 150 miles to a doctor, where his feet were amputated. After he had recovered, they continued on to Platinum where the residents gave them clothes and his wife worked for their food until the little ship *Fern*, Pete Wold's boat, arrived. They were given passage to the States. Thus one family found misadventure in the North.

Many other lived adventurous lives without considering them so. It was just routine to them. There was Tuffy Edwards who came to Bethel for treatment of his frozen feet. He had attempted to leave his mining claim for the winter but found the rivers covered with thin ice. He was forced to walk seven miles by using two boards to spread his weight on the thin ice. He would place one board on the ice ahead and walk on it, then recover the board behind. His feet were badly frosted during this tedious trip.

Another prospector, Jans Qualmie, broke his leg while in the hills. He sent a message home by tying a scribbled note about the neck of one of his dogs. His children attempted to find him but without success. Meantime he survived on roots and berries. He sent a second message by another dog, this time with better luck, and was soon found and returned to his village.

Two men lost their oars from their boat in the ocean just off Goodnews. They drifted all night, helpless because of shore ice. One man's feet were frozen, but in the morning they both walked over the thin ice with the aid of boards they tore from the boat, and arrived without further incident.

Alaskans protect themselves from mosquitoes during the months of June, July and August by wearing mosquito netting, which fall over their hats and shoulders, thus protecting their faces and necks. Should a person tear his shirt and be unable to mend it, the pesky insects would practically eat him alive; there were tales of men being blinded or driven mad by them.

Snow blindness often occurred during the early months of the year when the snow reflected every ray of the sun. Occasionally persons were careless or lost their snow glasses and, as a result, were blinded. Not only could one suffer the loss of his sight; the eyes became inflamed and lids so swollen the eyes were closed tightly. Those so unfortunate would suffer extreme agony and without assistance were likely to perish.

The natives of Bethel had been well looked after by Mrs. Heron. She had been at their beck and call, visiting all their homes often. The natives expected the same of the physician. They expected him to make daily rounds just in case they might desire his services and they occasionally made this known. For the whites there was a prescribed fee schedule and the physician was required to collect this and turn it in each month to the treasury of the United States, and it was hard to argue this with the people who paid the taxes to support the whole program.

The natives were obtaining more and more employment, and, incidentally, more liquor. A group of Bethel natives, who did commercial fishing at Nushagak in Bristol Bay, would, following payday, charter a plane and come to Bethel where they would go on a protracted binge, buying liquor until their money was exhausted. Nights were filled with howling and groaning, and from our window we often would see a group of them gesticulating drunkenly, and sometimes they appeared to be having a free-for-all, but instead of striking each other with fists they bumped each other with shoulders and knees.

One night their yells sounded somewhat different. There was a woman's voice, and the screams seemed to come from the riverbank just below and in front of our house. Upon investigating, I saw one woman scuffling with eight or ten men. I informed the United States marshal who lived nearby, and he settled the affair diplomatically by sending the woman home and the men to their accustomed haunts elsewhere in the village.

Another night I answered a knock at the door and found a young man who sadly announced a baby at his house was very ill, possibly dead. I accompanied him to a cabin that was occupied by a native whom I knew to have two daughters. Both daughters were unmarried but pregnant; the older one had already had her baby, who was apparently the pride of the household.

When I entered the house a dozen or more natives were sitting about the wall, all appearing very sad, while on a bunk bed sat the mother holding a newborn infant. I touched the baby and found it cold and rigid. I broke the news to them as gently as possible and sympathized with the family in their misfortune. When I saw there was nothing further I could do, I went on my way. The father explained for the unwed mother that she was bashful and had gone outdoors to have her baby. Later I got a different explanation from the native girl who helped Virginia with the housework. She said that when the girl was to have her baby the father threw her out of the house, whereupon she went to her brother's cabin and he, too, threw her out. She ran back and forth between the two but could get into neither house. Finally the baby came, in the zero weather, in a snowdrift. Not until they were certain the baby was dead did they allow it into the house. Then they called me.

One evening just at dusk I saw a plane land on the sandspit alongside the river. It was too dark for me to identify it, and I held my breath as I saw it come down, touch ground and come to a stop. I continued on my way and almost collided with a man running up the riverbank. Seeing me, he asked where he could find the doctor. I recognized him as my old friend, Joslyn, whom I had not seen for two years. He hurriedly explained there was an epidemic at Bear Creek and handed me a note from the mine operator asking me to come at once.

A few minutes later we were in the air, with the plane pointed toward the first range of mountains (obscured by black storm clouds). We made a circuit around the storm, avoiding the worst part. A half-hour after we were over the mountains, we saw the lights of the dredge and camp buildings. We circled the village and saw a light flashing in the blackness beneath us, apparently a signal to the pilot. Joslyn flew back to the tallest mountain peak, then turned and flew straight for the blinking light. All about and below us was blackness as our plane grew silent and glided down between ever blacker walls that rose higher and higher on either side. Black spruce, they proved to be, as we came to a stop on a muddy cleared strip scarcely 50 feet wide, and there standing before us was the man with the flashlight. To me our safe landing in such a place was a near miracle, but the pilot was calmly tying the plane down as if this sort of thing were commonplace. This done, we followed the man with the flashlight to the manager's home.

We were very hospitably entertained by the mine operator and his wife, but when I inquired if I should not see the sick natives they said I need not see them before morning. I could not help feeling provoked, recalling that Joslyn and I had risked our necks for an emergency that did not exist.

Next morning I saw the sick patients who had suffered an intestinal upset—following a big meal of tipnuk, I presumed—but they had recovered. Having nothing further to do, I made ready to return to Bethel but found Joslyn had flown away with his charter of passengers. There had been no provision for my return, so there was nothing for me to do but wait. At noontime I heard the hum of a plane, so hurried out to the airstrip in time to see Chet Brown come in with his big Pilgrim, with which he was freighting. I hopped onto the floor of the plane's freight compartment, and we flew to Bethel.

One night I was aroused from my sleep by loud hammering on the door. Rubbing the sleep from my eyes, I opened the door and peered into the dark and saw an Eskimo youth.

"Come with me," he said. "Johnnie has broken his arm."

"How did he break his arm?" I inquired.

"Airplane fell with him."

Peering into the fog and black night outside, I wondered if I was hearing right, so asked him to explain.

This was the climax to the Saturday night dance at the Northern Commercial store, which was well attended that night by both natives and whites, and as the liquor store, in a corner of the larger store, did a rushing business, all became merry. One of the native boys, who was employed by pilot Moore to run errands and help with odd jobs, which go with keeping airplanes in repair, boasted to another he could fly an airplane. The two went down to the river where the plane was kept and they started it and got into the air. They flew up and downriver, then around and around Bethel, but in the dense fog they could see nothing. They finally came down in a clump of willows near the river, with only a broken arm for the pilot, but the plane was a total wreck. Needless to say, pilot Moore was out of business.

This was not the end of the natives' interest in flying. At the following Saturday night dance another native, likewise a mechanic's helper, boasted that he, too, was going to fly a plane. One of the other mechanics warned the native not to attempt to fly and an argument ensued, which ended in a fist-fight, the native coming out second-best and getting thrown into jail besides. He was released as soon as he sobered, but he lost his job as helper.

This same native attended the following Saturday night dance as usual, but one day he was absent from the village and a week later his body was found floating in the waters of the lower Kuskokwim. People concluded he had gotten drunk and fallen into the river and drowned.

There were other strange happenings which had to be overlooked, or not noticed at all. One day a woman came and said there was the body of a native thawing in the backroom of the church and wondered if I cared to see him. I accompanied her and found the Mission lady busy with a boy's body, which had been placed before a hot stove in order to thaw him sufficiently to straighten the knees, which were bent at right angles, so that they could get him into a box. The boy disappeared from home the night before and was not looked for until that morning. They found him suspended by a rope about his neck in a small building, his head almost touching the ceiling and his toes barely two inches from the floor, with knees bent at right angles and parallel with the floor.

I talked to the United States marshal who interviewed the family, then called a jury. The stepfather and several other natives were heard, but the information given was very unsatisfactory and had to be extracted by questions to which a native would answer "yes," and when the question was repeated would answer "no," so that the more we asked the more confused we became. Finally, one of the jurors stated he would not convict anyone on the testimony of these natives and all the others of the jury agreed. The matter was dropped.

One day I returned to Bethel from an upriver trip and as my boat touched shore a delegation met me saying there was a very sick boy at the roadhouse operated by an Indian, the wife of a white man and known as "Step-and-a-Half" because of the manner in which she walked, having one lame foot. I was led to the patient, who had been placed in an upstairs room. The boy was irrational, and I suspected he had cerebrospinal fever. A spinal puncture confirmed this diagnosis, and I told the proprietress I would have to quarantine the roadhouse. It was Thanksgiving Day and a turkey dinner had been prepared for her guests, so she was counting on a profitable day. When she returned to her tables she found the guests had fled, and she became very angry at me. She cursed, using every insult she knew—in Indian, Eskimo, Norwegian and English—and declared she would kill me, and as I worked over the sick child, she kicked and spat at me.

I removed the patient to a tent, which the proprietress' husband and I pitched on the tundra behind the roadhouse, and cared for him there. I enforced the quarantine for ten days, since the roadhouse keeper had several children, and they had all been exposed. Nothing further happened; none of the others came down with it and the little fellow who caused all the trouble recovered.

Months later I was called late at night to the home of "Step-and-a-Half." I was amazed to find as my patient a lady seemingly misplaced, one so refined and cultured in speech and appearance. Her dress and bearing indicated she was an intelligent and well-educated person. Also, she seemed very much disturbed and I feared she was about to suffer a nervous breakdown. I sat for a long time talking to her and, after she regained her composure, she talked. Hers was a very interesting story. She had lived all her life in Norway where all her relatives had lived, all except a brother who many years before had come to Alaska to make his fortune. He wrote glowing letters back home about an enchanted land and an Indian princess he had married. This sister saved her every penny in order to visit him, and she had finally arrived. Now after only a few days, so disillusioned was she that she had become ill. Evidently Alaska did not have the appeal for her that it had for her brother, for her stay was very brief.

Without doubt the natives received better care than did the whites. Sometimes I began to hope something would happen to jar us loose from the rut we had gotten into and reflected with misgivings on the saying I had so often heard: "To stay in Alaska for three years was to insure one would always stay there." The only reason I could assign for this was that a person in Alaska began to feel he had forgotten so much and the States had progressed so that it would be difficult to find a place again in that busy outside world. I began to wonder myself: Could I take my place and compete again with other doctors in the States?

Mary Christensen was adopted by the Georges after her Kuskokwim trader father died. She traveled with the George family to Barrow where she tragically died of tuberculosis.

Pioneer Celebration

Time came for the annual pioneer celebration. The Alaskan Pioneer Association was open to all persons living in Alaska prior to 1925. These oldtimers felt a very strong bond of friendship towards each other. Once each year, in every city and village in the entire territory, the event was celebrated with a dance. This year they were to have a dance in the territorial schoolhouse.

It was known I was an artist by avocation, so I was asked to help decorate their hall. It was the same auditorium that I had helped dedicate when we first arrived on the Kuskokwim. There was a group already at work and they requested me to paint the front wall with both a large picture of a dogsled being driven by a sourdough at the gee pole and a large "Welcome" in red and green crayon overhead. However, one of the men had already begun the word "Welcome," and there was not room for both of us on the stage. All decided, therefore, I should decorate the plywood panels of the side walls and back.

I began. First I portrayed an old sourdough on snowshoes, sinking almost to his knees in the snow. His nose was red, his chin was covered with whiskers, he had a pack on his back and a ptarmigan dangled from the end of his rifle. On the opposite panel I pictured another, washing for gold with a pan beside a gravel bar.

Cheered by my companions' enthusiastic approval, I waxed eloquent and went on panel after panel across the back wall, then began filling those along the sides of the room with Eskimos, Indians and dance hall girls, clad in what I imagined was perfect attire for the early period I was trying to recall. By daylight I had the hall decorated, much to the satisfaction of all present. Then we went to our respective homes and slept, feeling we had accomplished a good night's work.

The next day, after finishing at the dispensary, I recalled that I had overlooked some minor details in my work of the previous night, so walked back to the schoolhouse. As I entered the front door I saw three men standing in the entrance of the auditorium. The one facing me was the teacher; his expression was that of a bank teller being interviewed by a holdup man. The two others I recognized from their backs as pioneers, both of whom were sourdoughs who married native women. Instantly I got the idea that all was not well. I could hear them, and it was plain someone had been insulted. The pictures, they thought, were making fun of them, and they would not stand for it. I did not have to tell them I was the artist; I suspected they already knew. I went in past them and closed the door. After a few minutes the teacher came in, having managed to dismiss, temporarily at least, the delegates. He felt as badly as I about the affair. I could not understand why they took it so seriously, but, without further delay, brought a bucket of hot water, soap, and some rags, and we proceeded to erase the pictures.

As I left the schoolhouse, the sourdoughs were waiting for me, and they told me what a low-down trick it was for newcomers to make fun of the pioneers of the country. I explained I had not meant it that way, and went on home. Later in the afternoon I tried to keep out of sight. I went to the dispensary, as usual, and as I started home five men, all pioneers, came to intercept me. The spokesman said: "We heard about those pictures down at the schoolhouse, about us being insulted." I did not know what was on their minds, but declared I meant well. Then they said they had appointed a delegation who were inspecting the pictures at that moment. I made no reply, and they went on their way home. In a few minutes there was a loud pounding on the door. The delegation was back. This time they were wrathful at the two sourdoughs who had first objected. The delegation thought perhaps the pictures were all right, but when they got there there was nothing for them to see and judge. They asked me to re-paint them so they could pass judgment, but tempermental as genuises are reputed to be, I refused.

It was a nice party; many were in attendance, not only from Bethel, but from both up and downriver. It was the one occasion during the year when all these men and women met. They visited, danced, and ate, and disbanded reluctantly only when daylight began to break at 6:00 a.m. While I attended the dance, I did not feel entirely comfortable under the baleful glances of some of the old sourdoughs, so at first opportunity slipped quietly out and scooted for home.

Trip to Anchorage

Early one morning Jack Peck asked me to see his wife, who was expecting a baby. I was alarmed at her condition, for her symptoms suggested a diagnosis of "abrupta placenta," a serious situation demanding she be hospitalized at once. Jack had a load of passengers intended for Anchorage, but we placed his wife in the plane, and I went along, in event she needed emergency care.

Jack used his fastest plane, and we were in Anchorage in less than four hours. We took her to the new Providence Hospital and Dr. Heitmyer, a physician I had known in the States, took charge of her. Jack and I stayed at the Anchorage Hotel. My room with its bath, its bed with clean, white sheets, and the good food served, was something out of this world. I must have forgotten how luxuriously people in cities lived.

There were three artists well-known in Alaska: Sidney Lawrence, Eustace Ziegler and Ted Lambert. Sidney Lawrence's studio was in the Anchorage Hotel; Ziegler and Lambert used the out-of-doors as a studio; they floated down the Yukon and the Kuskokwim, working from nature. Ziegler called Seattle his home; Lambert, Fairbanks and Copper Center.

Whenever in Anchorage, I visited Sidney and Mrs. Lawrence, who, like her husband, was an accomplished artist. She spent a great deal of her time compiling drawings of flowers native to Alaska. Sidney Lawrence, who was growing old, was a small, wiry little man who, despite a hearing aid, had great difficulty in making conversation. I would watch him with admiration as he worked. He insisted his earlier work was much better than he was then doing, probably because he was now only working from memory, while his earlier work was from nature.

Lawrence had lived an interesting, exciting life. I heard it from Mrs. Lawrence as well as from himself. The story followed my inquiry concerning a scene on a large canvas resting on an easel just inside the livingroom of their apartment. For some reason I'd asked, "How long has Mr. Lawrence been working on this canvas?"

"Forty years, and he'll never finish it," was Mrs. Lawrence's reply.

As a boy, Sidney Lawrence studied art in England, France, and Italy, but without funds, he went to sea in order to earn a livelihood. He also became a soldier in the service of the Empire, and served in five of England's wars. Once while in South Africa, his unit was completely surrounded by the enemy. They formed a hollow circle, their backs to the center, and fought against great odds. Lawrence was struck on the head by a club wielded by one of the Africans, and when he regained consciousness he was deaf. He continued going to sea, and once, while sailing in southern waters, a cross appeared in the sky. The captain of the ship ordered the ship's course changed in the direction of the cross, and after a short time, they came upon a lifeboat with a man standing hunched over, completely stupified, in the middle of the boat. He was standing, staring down at three dead men slumped at his feet. The man's shoulders sagged, his arms hung loosely at his sides, and he took no notice at all of the approaching ship. In the foreground was the dorsal fin of a shark, protruding from the water in a manner suggesting it was traveling at great speed.

Lawrence made a sketch of this on a small canvas at the time. Impressed with the experience, upon his arrival in England he bought a large canvas, and began transferring his picture to it. Just about then Queen Victoria died, and he was commissioned to paint a picture of her funeral. He had no other canvas or money to buy one, so he painted over his shipwrecked mariner a picture that was placed in Westminster Abbey.

Thereafter Lawrence was rarely peniless. Once more he bought a large canvas and began to paint that scene, and now it stood forty years later in his livingroom where he and his wife spent their leisure hours. I stood looking at it. "He says he will never complete this picture," Mrs. Lawrence said, and I inquired the reason why. She brought out the small original and compared them. The shark in the large picture didn't appear to be moving with the speed of that in the small one. Sidney Lawrence will never be forgotten by Alaskans. He was their artist.

It snowed hard all the following day, but the next day the sky began to clear. Shortly before noon we took off over fog clouds, which hid the entire country except the Alaska Range, which loomed ahead. Its highest peak, Mt. McKinley, the highest in North America at 20,320 feet above sea level, was our beacon. We skimmed the tops of the billowing clouds, and often turbulent air made it a rough ride, especially through

Merrill Pass.* At its exit, over the beginning of Stony River, we were tossed about like a leaf in a storm. I sank my fingernails into the seat, but if Jack was concerned at all, he did not show it. We turned down the Hoholitna River and then up the Holitna River, and we passed over the 44 placer mining claims the natives and I had staked on Canyon Creek.

Bethel was just ahead, but the dense snow clouds turned us away. We dodged them, continuing north and east until we reached the Kuskokwim River at Sleetmute, about 200 miles upriver from our destination. The river was running ice from shore to shore, and the land was everywhere covered with snow. Most of the sandbars were strewn with large ice cakes, and we could not determine whether the others were safe for landing because of the snow covering, or whether they were strewn with boulders and driftwood. McGrath was a hundred miles upstream and we tried to reach that village, but soon heavy clouds blotted out our view ahead and we had to turn downriver again. By now we were searching the riverbanks for any safe landing place. Snow clouds blanketed Sleetmute and visibility was lessening as we turned and retraced our way upriver again. At the first bar that looked at all friendly we descended and landed safely.

We were glad to be down. However, we were on the opposite shore from Sleetmute and several miles above it. The river was less than half a mile wide, but very swift. Ice cakes 30 or 40 feet in diameter ground together as they floated with the current, filling the stream from bank to bank. While we pondered what to do, two Indians came floating downstream in a boat, and we hired them to take us across the river. We floated downriver and landed on the opposite shore, and then walked until we reached the village. Sleetmute consisted of a trading post, operated by Nick Millick, and several log cabins. The village teacher lived in the native settlement on the opposite shore still further downriver.

Nick had a native wife and several children. In addition to his trading post he operated a quicksilver mine. With another man he had rigged up a still from some old drums, which produced two flasks daily, each valued at about $200.

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*Named for its pilot discoverer, Russell J. Merrill, this 3,200-foot gap through the Alaska Range, commonly called "The Pass," was the chief link used by the Alaskan bush pilots between the west coast and the interior.

Nick's living quarters were a part of the store building, and they appeared to be very comfortable. Most noticeable were long shelves of books arranged along the walls of the livingroom, for his hobby was reading history. We remained with him five days, and during that time I read the life history of Genghis Khan as well as a volume of ancient history. On the fifth day the storm abated somewhat, the temperature moderated and the river began to rise. The new snow was two to three feet deep and soft, making travel quite difficult. Jack worried about the safety of his plane, for the water was scarcely four feet below the sandbar where we left it. To make matters worse, the ice pans were growing larger, making the river more difficult to cross.

We hired a man to take us across the river, and we each carried five-gallon tins of gasoline. The river was more fearsome than before, for the ice pans were extremely large. The man guided his boat in, out and around rushing, grinding ice floes, and by his skill and a lot of luck we arrived safely on the other shore, a long way downstream from the plane. We walked through the soft, deep snow, crawled through the willows, and made our way slowly upstream toward the plane. As if walking with five-gallon tins of gasoline through deep snow and brush was not enough, we came to a wide slough which we were obliged to cross. The slough was filled with huge, snow-covered blocks of ice piled topsy-turvy, and there was the ever-present possibility of stepping through the ice and sliding beneath the water. We each used strong sticks to test the footing ahead, and then proceeded over more miles of snowy brush and drift-covered beach. There was another slough, but just ahead we saw the plane.

Quite fatigued, we arrived at the plane and added our ten gallons of gasoline to its depleted tanks. We warmed the engine, then the oil, started the motor, and ran the plane up and down the sandbar to make a path in the deep snow for takeoff. We then tried to get into the air. Twice we went down the sand strip with the engine wide open and the propeller's pitch turned to its greatest angle, but it seemed we were not going to be able to get off. We needed skis and had only wheels.

I realized that Jack had the greater part of his worldly goods wrapped up in that plane, and he had no intention of losing it in the river. Once more he turned the plane around, and, with the engine wide open, headed down the makeshift air strip, the river with its floating ice directly ahead and a cloud of snow everywhere behind. This time he did not slow the engine when the plane did not seem to want to rise. We approached the river and plunged on; over the bank we jumped, and into the air, skimming the ice, then rose safely. I am sure I stopped breathing; I do not mind saying I was frightened for a second or two, for it was all over just like that. The good Lord certainly had his arms around us that time, I declared.

More than ever I admired Jack. In my estimation, he had what it took. I first met him shortly after he had the misfortune of having a plane blown to pieces under him, when he had attempted to go to Platinum, and as he approached the sea at the end of the mountains, the Wooley-Walley winds caught him and stripped the fabric from his plane's wings. He was thrown into the soft mud beside the ocean, and lay hurt for days until someone saw the wreckage and investigated. Only his rugged constitution kept him alive. Jack still had a limp from that accident, and a worried lump in his throat when he went up for inspection, for fear the licensing board would reject him.

I recall another time when Jack was flying with a load of passengers and one of his engine's cylinders blew off. He glided and landed on a sandbar without injuring a single passenger, and stopped so close to the water's edge he was able to take a barge up and roll his plane directly onto it.

Long since I had developed a great respect for the Alaskan pilots I had come to know. They were a fine lot of men. Those who flew for long in Alaska were most respected; newcomers from the States had to prove themselves. Many of them often showed daring and skill, but were considered less safe. Those older fellows had learned to be cautious and to respect Alaska's hazards. In fact, it was their good judgment that had spared them. They flew without the aid of beams or beacons, for there were none, and few planes or terminals were ever equipped with radios in the beginning. They called it "flying by the seat of their pants." It seemed to us, their passengers, that they trusted only themselves. We all thought the Alaskan pilots the world's best.

Trip "Outside"

One day in early April a telegram announced that Virginia's mother had passed away in her sleep. This was entirely unexpected, and was a great shock to us both, for we were very fond of her. Virginia decided to leave with the children for the States at once, thinking to visit her father and console him. Accordingly, we packed a few things for their journey and arranged a flight with pilot Chester Brown in his Pilgrim. The morning of their departure arrived and we loaded them all onto a dogsled, and drove them out onto the river ice. There I made them as comfortable as possible in the big plane, said goodbye, and with a very heavy heart, watched them out of sight. This was the first time Virginia and I had actually been separated since we had been married, and I was very unhappy at the thought. I went home to an empty house and whiled away the time as best I could. Next morning I started my rounds, visiting village sick, when I was intercepted by a serious-faced Lanky Rice, Jack Peck's mechanic, who spoke: "I don't want to worry you, Doctor, but your family is down in the Pass." That is all he knew as there were no details. I was numb as the situation fully dawned upon me. My whole world suddenly fell apart; if the report was true, all I cared and lived for was gone.

I envisaged Merrill Pass as I had seen it so many times—two walls of mountains with sides so precipitous that no human could climb them, and only a river at the bottom. I could not imagine anyone surviving a landing there, and if they miraculously did, they could never get out; they had neither food nor supplies to withstand the weather there, for it was 30° below zero at Bethel, and in the Pass it would likely be minus 50° or 60°. I could only hope and pray for a miracle, or that the report was incorrect.

We went to Peck's radio shack and sat beside his receiver all that long day. Late afternoon we heard pilot Brown come on the air, saying, "I'm all right now. I can see Turnagain Arm."

What a relief! It was wonderful to hear Brown's voice, and while we had no way of knowing what had occurred (that Virginia was not with Brown), I felt that a miracle of some kind had taken place, and that all were safe, for Turnagain Arm was the first water sighted on the Anchorage side after leaving the Pass. Virginia had promised she would send a wire from Anchorage, and I awaited it with as much patience as possible. Three long days passed; then a message announced their safe arrival, but gave no other information about the trip. She did say that little Virginia was quite ill, but she believed it was because she was homesick for her dad, and that if she did not improve all would catch a plane back to Bethel. I impatiently awaited further word of them.

Days later I learned the events of their trip. Pilot Brown decided it was too dangerous to take passengers through the Pass, so unloaded them at the McGrath roadhouse. He then attempted the Pass, but at its entrance turned back and set his plane down on a tundra lake, where he waited out the storm. As soon as the weather settled, Virginia obtained passage in another plane, and proceeded on her way. Once in the Pass there was no turning back as the fog clouds lowered and covered the mountain tops, making the way a very crooked tunnel. With the canyon walls closing in so that the plane's wing tips seemed to almost scrape on either side, the pilot had to turn suddenly and sharply side to side, sometimes appearing to fly directly toward an abrupt mountainside, only to wing over at the last possible instant and continue on. Only the pilot's intimate knowledge of this maze of mountain peaks made passage possible, and even then the danger was great. This time they were plain lucky. When they were through, the pilot turned and remarked to Virginia that he had been afraid he would meet another plane in there, whereupon Virginia answered that they had, and had passed it.

Arriving at Anchorage, Virginia requested accommodations at the Anchorage Hotel, and was given a lovely apartment. However, her troubles were not over. Little Virginia, whom I had waited upon and spoiled with attention all the days of her life, apparently was homesick. She cried constantly, and would not be consoled. Virginia became alarmed and called a doctor, who, to her surprise and pleasure, she found to be our friend Dr. Heitmyer. He promptly sent for a car and took them all to his home, where they stayed for several days, until her ship arrived. Meantime, little Virginia's health improved. A few days later, I received a wire saying they arrived safely at her father's home.

Meantime, in Bethel, to avoid loneliness I kept busy as possible. I managed to travel over most of my district, using plane transportation when and where possible, but more often dog team.

During the cold spring months the glare from the snow compelled everyone to wear dark glasses. Snow blindness was the certain penalty for neglecting this precaution. I purchased glasses and wore them. I found that the metal bridge over the nose often caused the skin underneath to freeze, so I did as the others did, and wrapped all metal parts with yarn.

It was my custom to shave without looking into a mirror, but one evening, while in one of the village stores, I became intrigued with a mirror that magnified greatly. Next morning when I shaved I used my new mirror. Much to my surprise, I saw a crust or growth beside my eye where the glasses rested. I had recently seen two patients with epithelioma, and I feared I had one. I tried to account for the spot due to freezing, but discarded that idea. I recalled splashing my face with grease a few days previously, but could not recall where it struck me. However, the spot did not appear to be a burn, and it was not painful. It remained the same for several days and I began to be concerned about it. The time was mid-May, and the river threatened to break up with the first warm weather. When the break-up occurred there would be no plane transportation for possibly six weeks. I decided to ask permission to seek medical attention. When this was granted, I set out by first plane to the States.

I flew with Peck, first to Flat, an old mining village, then to Anchorage by way of Rainy Pass. After leaving the mountains we flew for a long time over quagmire, so soft that it appeared no animal could cross, at least during the summer months. No doubt this was the country that trapped and preserved prehistoric animals, and I could only wonder what would happen to a plane should it be forced down. I could better understand why the gold-digging dredges often unearthed skeletons of prehistoric animals, some of which had flesh so well-preserved that it was used for dog food.

We landed at Anchorage and the pilot and I went to the Anchorage Hotel. I could neither take enough baths nor get enough of the food or the city streets. I certainly enjoyed getting back to all these modern comforts. However, what I noticed most of all was the quiet—the absence of howling dogs, to which I had become so accustomed.

Likewise, the trip back to the States by ship was enjoyable, for we traveled through lake-like waters of the Inside Passage, past the coastal towns. I ate salads with all my meals, even breakfast, and was dubbed "The Human Cutworm" by the others who ate at my table.

Arriving at Seattle, I immediately went on to Portland, and soon was in the office of an old friend who specialized in diagnosis and treatment of malignant growths. After inspecting my ailing face, he expressed the opinion I had suffered a deep skin burn. The absence of pain was due to the toughening of the skin of my face from exposure to subzero temperatures. He requested me to stay a few days to make certain of his diagnosis, and I was happy to do so.

My family was anxious to return to Alaska with me. We all wanted to return to our home in the North. Somehow the glamour of life in the States did not appeal to us, and we could hardly wait for our boat to get under way.

Again we traveled the beautiful Inside Passage, and this time left the ship at Valdez, southern terminus of the Richardson Highway. There the stage for Fairbanks waited for us, and so impatient were they to leave they gave us no time to see the village. One of Bethel's pilots, Ray Peterson, met us at the docks, having seen our name on the passenger list, and wanted to take us directly to Bethel by air. But our plans were to travel the famous Richardson Highway, and to visit our friends the Lamberts, at Fairbanks.

We had heard much of the Richardson Highway, but were not prepared for what we were to experience. It was a one-lane, graveled road, with deep holes and a washboard surface, which made bus riding anything but comfortable. Inside the bus, passengers smoked cigars and cigarettes, which, with the closed windows, produced a dense smog. But the scenery was utterly beyond description. Up and up we went, into the beautiful mountains. Often the road passed between deep cuts in the snowdrifts. This was, after all, the Alaska we had hoped for. The stage did as the trains do in Alaska—stopped at dark. We came to the village called Tonsina, which consisted only of a roadhouse sufficiently large to accommodate the passengers. It was a long, rambling, log building, with cracks chinked with cement, standing beside a rushing river, filled bank to bank with sparkling icy water, which emerged from beneath a clump of birch and quaking aspen and disappeared under another. Surrounding us were hills, rugged and beautiful, their slopes covered with black spruce; the sky was filled with billowy, white clouds that gave a scenic background, making all who had cameras practically exhaust their supply of film.

Next morning the bus continued along the highway, and we stopped at a hunting lodge beside the clear waters of Copper

River. Soon we came to Rainbow Ridge, where indescribable color was added to the already beautiful hills. Our way then led down the Delta River. We stopped again when we came to Black Rapids Glacier. Here we had only the Delta River between us and the black ice, which was more than a mile wide. As we watched, great chunks of the glacier fell into the river, throwing clouds of spray into the air—a demonstration of the speed with which this glacier moved.* We soon came to a section of road littered with boulders, some the size of a large house, the result of a recent waterspout, and were forced to detour by way of a deeply rutted trail. I, for one, had a great respect for Alaskan storms after seeing what this one had done.

The way grew steep, and the road more and more a path of ruts. The bus stopped often, for the engine overheated and balked. We did not mind, for the beauty of the landscape more than repaid us for any discomfort. We wound in and out of timbered aisles of birch, willow, aspen and spruce beside lakes and rivers. Once we ferried across a river because there was no bridge. We concluded we were seeing Alaska at its best; at least, it was the Alaska we had expected to see when we first came.

Just at dusk we came into a clearing and saw Fairbanks, a beautiful little modern city in the heart of Alaska. We had taken two days for the trip from Valdez to Fairbanks, a distance of slightly more than 300 miles.

There were several tourists from the States on the stage, and all were delighted with the friendliness of the sourdoughs, who readily and enthusiastically talked of everything Alaskan. This friendliness touched the tourists and they thought the old-time Alaskan the finest of fellows. The bus discharged its passengers at the door of Fairbank's largest hotel, where most sourdoughs stayed when visiting that city, and the passengers hastened to make sure of suitable accommodations. As we entered the door, we met one of the tourists coming out, and he appeared highly indignant. He warned us not to go in "there," for they charged $10 for room and a bed and he thought that outrageous; he was going elsewhere. Knowing this was the open season on cheechakers, we proceeded into the lobby and were again greeted by pilot Peter-

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*The remarkable movement of this glacier, near the Black Rapids of the Delta River, led to its alternate name, Galloping Glacier.

son, his mechanic, and others from Bethel. I continued on to the desk and registered for a room, which the clerk gave readily, further accommodating us by putting cots in the room for the children; our bill for the night was $2.50.

We had hoped to spend several days with our friends, the Lamberts, but since Peterson had met our ship at Valdez and had flown on to Fairbanks just to fly us home, we decided to shorten our stay and return to Bethel with him in the morning. We had an enjoyable visit with our friends; yet all too soon we were in the air, on the last lap of our vacation.

Below us spread tundra and lakes on every hand. Yellow water in great S spirals indicated the Kuskokwim at flood stage, while smoke billowed up from vast tundra fires everywhere. No sandbanks or landing fields were to be seen during the 500-mile journey, and ours was a wheel plane. Happily, we made it without event, arriving at the airport in Bethel late in the afternoon. It was the end of June, and a welcoming delegation swarmed over the field to meet us—mosquitoes, little ones, big, black ones, millions of them of all descriptions, all hungry, swooped upon us. Caught without mosquito nets we were only too happy to reach the welcoming shelter of the roadhouse.

We were happy to be in Bethel because we were home in our world there, north of the Alaska Range, where we would live our lives to a happy end. Our dreams had come true.

When we reached Bethel we were surprised to find the sourdoughs had returned, so we had to give up our living quarters, which we had made very comfortable. The only other available place for us to live was an unfinished, unheated two-room attic "apartment" over the native school—one small bedroom, with kitchen and livingroom combined. The only entrance was an outside stairway, and there was only one window to the outside and that in the livingroom; our lights were kerosene lamps. The furniture consisted of a table, three or four chairs that had been discarded from the school. We found one old bed; the children slept in boxes. The rest of our furniture consisted of boxes stacked around the room for cupboards and bookcases. [illegible] teachers, living in the warm, comfortable apartment below us, would not allow the use of a washing machine they had taken from the hospital for fear it would become worn. We had to carry water from the river, up the stairs, to wash clothes for all of us and diapers for two babies, and the waste water had to be carried back down the stairs. There was an outside privy, but for the children we used gasoline cans; that along with the coal for the stove, again had to be carried up the stairs, and the ashes down. There were no fire escapes or other safety features.

Dr. Corthell had retired from the hospital at Mountain Village and returned to the States. His replacement was judged unfit and was discharged and sent back to the States, because he was considered to be mentally unsound. Unexpectedly I received orders to go immediately to the Mountain Village Hospital to carry on. I proceeded by the first available plane. I had been at the hospital for some weeks when an Alaska blizzard overtook us, and all plane travel was impossible.

Winter was upon us and at home Virginia had problems. The children were sick; our six-month-old baby developed pneumonia. Though Bethel was headquarters of the mission, so that in addition to the two teachers living below us, three or four mission families were living in the village, not one person came to see if my family needed any help except Big Hans, an old sourdough. Hans carried water and coal, he made a rope ladder, which he anchored just inside the one window, and he attached three single ropes nearby and instructed Virginia carefully, in case of fire, how to break the window and tie a rope around each child. (She should lower each one to the snow below, then descend the rope ladder and hope there would be someone there to help carry them to safety.)

The blizzard abated somewhat and Virginia sent Jack Peck to Mountain Village with a letter. He flew in just at dusk. Next morning I returned with him to Bethel. There I found my family's living conditions intolerable. We knew if we remained we would jeopardize the lives of our children. Therefore I wired my immediate resignation to my superior in Juneau, and made arrangements with Jack Peck to fly us to Anchorage. In Anchorage, to our surprise and delight we met Nora, who was prepared to accompany us as one of our family. We accepted her as our foster child. From Anchorage we went by train to Seward, and arrived in time to get passage on a ship bound for Seattle.

Once in Portland, we fell into our old life pattern. We were accepted joyfully by our family, patients and friends. I obtained an office in the same building where I had been before going to Alaska. Before we went north we had had a home on Mount Tabor; now we purchased a house higher up on that hill, one actually in the park where on sunny mornings we saw the sun climb the eastern slope to the top of Mt. Hood and down to the western landscape in the evenings. We were very happy.

Though we were disappointed with our Alaska venture, it was more than made up for by our daughter Nora, who finished her schooling in Portland and became a teacher on the Bering Sea Island of Nunivak. She married a Signal Corps radio operator by the name of Guinn, and they had nine children. She later became the federal judge for the Fourth Judicial District of Alaska (the largest such district in the United States), a position she still holds.

Doctor Otto George holding Barrow Eskimo girl.

Barrow Revisited Thirty Years Later

It was 1970 when we left our car at the northern terminus of the Alcan Highway, parking it at the Fairbanks airport. We were again boarding a Noel Wien airplane--not a Ford Tri-motor or Pilgrim this time but a sleek, comfortable DC3—with every seat filled. Within an hour we approached Barrow, and the country beneath us looked familiar. There was the lagoon and the two villages, one on either shore, the narrow sandspit pointing like a slender finger toward north, while ice floes dotted the Arctic Ocean.

At first glance all was as we recalled it. But there was something new: the village was much larger and there were roads and pipelines winding through it and into the distance. Among other changes the years had brought the airstrip; no longer tundra, it was concrete and 5,000 feet in length. It was bordered by modern buildings with taxis parked alongside, and we were wisked off to the Top of the World Hotel. Not only did Wien Airways fly DC3s and DC7s from Alaska to Seattle, but our old friend and pilot Jack Peck had formed Alaska Airlines. Instead of Curtiss Robins and Cessnas he had moved to modern 707s that serviced not only Alaska. Ray Peterson, another friend, had gathered up other small airlines to form Alaska's Consolidated.

We learned that Charley Brower had passed on and in his stead was his son Tommy. Tommy had been a rancher living inland and to the west from Barrow. He had lost his entire herd of 15,000 reindeer when some fun-loving young men employed by the oil companies frightened the animals with their snowmobiles, causing them to flee and join herds of wild caribou. Following this Tommy went into partnership with his father. Try as I would I could not recall buildings of the old Brower village. Tommy explained the change. When his father died he was laid to rest on the slope overlooking the village. As if to mark the passing of an old friend, the elements became angry, and a wall of water came from the west and carried his village away. Tommy saw the wall of water coming and barely had time to warn his family and villagers in time to escape. We now were in the new village Tommy had built. It contained a restaurant, a hotel and warehouses, as well as several small houses occupied by natives. Beyond the lagoon lay the native village. Many of the buildings had a familiar look although the village had grown.

The most imposing structure was a new hospital. On the shore of the lagoon, it faced eastward, an el 600 feet long in each direction. The building looked so modern and was much larger than the one we were building when we left. It seemed large, but we were told it had only ten beds, that no surgery was done there and surgical patients were flown to Fairbanks. We entered and stood in the spacious waiting room. One patient was waiting and we spoke to the receptionist, who asked us to be seated. We saw the doctor walking about, but it was a long time before he came to us; then we stood while we talked. We learned he was a resident intern completing his medical training and could not yet practice for himself. Our interview was brief. We would have liked to have seen the new hospital but were not invited beyond the waiting room. Outside and behind the hospital were several new residences, one for each physician and one for the dentist; together they formed a small compound somewhat removed from the native village.

We trod familiar ground, though our former residence had been destroyed by fire. There were new dirt roads beside power lines, and iron pipes placed two feet above the tundra carried water and gas; all had water, lights and power. The village population had increased from the 300 of our time to more than 2,000. Evidence of Barrow's occupation by the United States Navy during the Second World War was everywhere. The once sandy beaches were now covered with wreckage of every description, and the village once kept almost spotlessly clean during the short summer was now covered with litter; garbage and tin cans lay feet-deep beside the houses, the worst littering we had ever seen. Progress in capital letters had come to Barrow.

One house had a familiar look. I recognized it as the one I had last entered before leaving Barrow. I would never forget that. I was presiding at the birth of a baby. Our ship, the *North Star*, was waiting with my family and belongings on board. The captain was impatient to be on his way, fearing the Arctic ice pack would close up on him. The ship's whistle sounded three long blasts signifying his impatience. In the house the mother lay on a reindeer skin on the floor. Her house had one room and a storeroom; the belongings were a home-made tin cookstove, a wooden box, an alarm clock and a hot water bottle. That was all. I hovered beside the perspiring patient, torn between duty and the calls from the ship, and as soon as the baby was delivered I ran. Now we knocked on the door and a woman opened it. She recognized us and Virginia and I were joyfully dragged into the house. We were more surprised, if possible, than she was. We could scarcely believe what we saw. I sat in a big, comfortable armchair, before me was a television set and to my left was a beautiful electric organ. Elsewhere the room was beautifully furnished.

Such were the changes wrought by the occupation of Barrow by the Navy, together with the development of the lakes of oil located 80 miles east of Barrow, from which they formerly hauled oil-soaked tundra, their fuel when we had lived there. We recalled sending five gallons of the pale liquid to Washington years before, with the suggestion it might serve for diesel fuel for native boats, and enable the hunters to obtain more walrus and whale, thus making them more self-sufficient. Nothing came of it at that time.

The natives had changed. They no longer needed to fish and hunt for an existence. They were employed or had small businesses of their own. Their food and clothing were strictly modern and commercially made. They had one complaint; they were being restricted and could not move about as freely for camping and hunting as formerly. They were being told they could have only the small land about their houses. Because of these restrictions they were organizing. Barrow had a Chamber of Commerce and there was an organization of natives and they were fighting for their rights, making themselves heard. One of Alfred's sons represented Alaska in Washington, D.C.

During the war the Alaska natives formed a military defense force guarding Alaskan shores, and a large armory gave evidence of their participation with the military. One of Mr. Brower's sons was a parachute jumper and packed parachutes for the Barrow area. We learned he had married one of Alfred's daughters, the one who was herder for our small son Paul while we lived there, and they had 17 beautiful children. We were happy to find our little girl Nora, who had gone with us to the States to go to school before she returned to Alaska, was now a federal judge of the Fourth District.

The occupation of Barrow by the U.S. Navy had left many babies fathered by the servicemen. These children were taken into the homes of the Barrow people—they were wonderful people and they solved this problem gracefully. During our stay in Barrow we saw no other white persons except those who were on conducted tours. The natives said the government employees kept to themselves in their little compound. We saw nothing of them. Wherever we went we were recognized and we were amazed at the number we remembered. We had not expected this, but it made us very happy; after all those years it was as if we had been away for only days. There were new stores and all were well-stocked and there were show houses and restaurants. We entered the large general store; the storekeeper recognized us, and with a loud whoop threw his arms around Virginia by way of greeting. In the restaurants we were mobbed. We ate food and drank coffee, and all gathered around the largest table while we talked of old times. As people they had not changed unless they were less shy and reserved than formerly.

Our visit could not have been more perfect. I became a member of Barrow's Chamber of Commerce and of the Arctic North Slope Native Association. To add to our happiness they told us that they did not know what we were trying to do when first we came there. We were so concerned about the prevalence of tuberculosis, a disease to which they were accustomed, and resigned. Now they understood, and they did not have one single person with tuberculosis in the village. If anyone was found to have it he was sent to a hospital where he received treatment. Their fear relieved, they were now much happier and we were happy to have had a part in this. I recall getting a lecture from one of my superiors for frightening the natives about tuberculosis, and his insisting I correct my teaching by placing the sick ones back with those who were well, to allay their fright. This I did not do. I was shocked at my superior's incompetence.

Time came for our departure and we boarded our plane at eleven o'clock at night. The airport was quite distant from the village so we were surprised at the number of our old friends there to shake our hands as we boarded the craft. There was a lump in my throat I could not swallow as we sank into the comfortable seats of our DC3 and headed for the outside and home.

Conclusion

We have seen Alaska with our own eyes and have written of what we saw, hoping to portray it to others as it was in our day.

Perhaps we were most impressed by the enormous size, the vastness of the Alaska Territory, a land one-fifth the area of the United States, with a population of only 50,000. Half of the population was white, and most of this segment lived in the cities of Anchorage, Cordova, Fairbanks, Juneau, Ketchikan, Nome, Seward, Sitka, Valdez, and Wrangell. While all that great expanse north of the Alaska Range had only a few hundred whites, and each person was often miles separated from his neighbor, these people regarded the whole vast area as one community.

Many of the pioneers of this big community north of the Alaska Range were hardy men who went north for adventure. They hoped to go there and make a quick fortune, in order to return to the States to enjoy the luxuries for which other persons grubbed a lifetime. But fortune did not smile upon all, and as many stayed year after year, they had still greater fear that they had forgotten the ways of the States (if they even thought of returning home) and they would be unable to make their way there. Eventually their past became but a dream—besides, they loved Alaska, with its wide, unsettled spaces, and their freedom. They stayed, and in one way or another made their livelihood. Thus we found them: the traders with their little trading posts on the crossways of the rivers and coasts; the miners, some with small diggings, others still looking; the missionaries, who had divided the territory of Alaska among themselves, but soon began competing for that territory; the government employees, the doctors, nurses, reindeer supervisors, and teachers. Likewise, a territorial school system had its personnel, segregating the whites and Eskimos, making an odd, often confusing jumble.

Travel was limited by season, weather and distance. The airplane carried by far the greatest number of travelers, and seasonally the boats did their share. Locally, short distances were traveled by native riverboats in summer, and by dog sleds in winter.

Travel by dogsled, glamorous as it may appear to the reader, when done through necessity, in all kinds of weather and over hundreds of miles of trail, takes on a different aspect; but there were times it could be done in no other way. Suffice to say the hazards of emergency dog travel were many, and most always the driver grumbled that he was the biggest dog of all.

It was the natives who interested us most. They were of Asian descent, beyond doubt. Beyond physiological similarities, there were obvious geographic connections. Even in our day, there were many people still living on the Arctic coast of Alaska who had been carried away on the ice, and some had made their way to the mainland of Asia. On St. Lawrence Island we saw many families who had migrated from Siberia —some only 12 years before—and all lived in houses similar to those of their homeland. As the natives migrated farther onto the mainland of Alaska, they retained body characteristics, but dialects changed. However, the dialects were similar enough that natives visiting one section from another were soon able to speak the other's language with ease.

So much for the Eskimo's past. Our story has been of the present, but what of his future?

The native is a citizen of the United States, yet he pays no taxes; he is furnished with medical care, schooling, everything free and at the expense of the taxpayer. However, the natives were acquired along with the Alaska Territory, and Russia insisted they be given equal rights with the Americans. The territory acquired is valuable beyond calculation, and so are the natives who live there. Not only are they a pool of manpower, but they possess valuable knowledge, which they are able to impart to us. They teach us survival methods far superior to any we know. It was they who taught the pioneer Alaskans how to survive in that Northland, and we have borrowed from them: the commonly-used parka, for example, is copied directly from their dress.

Likewise, the Alaskan natives have learned from us—some that is good, some bad; but they quickly adopted our ways and methods wherever possible, realizing that our way of living is much easier and often more pleasant than theirs. This change began with the arrival of the Russians, who lived and intermarried with the natives of the Bering Sea and Pacific areas; and it has continued since then with the constant contact with whalers, miners, missionaries, traders, teachers, doctors and government personnel.

Lastly, a comment about the health of the native. The answer seems fairly simple: hospitalization of persons actively infected is a program that would call for a tremendous outlay of money, but it would mean disease conquered and the scourge of the natives wiped out. The natives would welcome such a program, as was demonstrated at Barrow when the sick moved to houses away from their families, and the uninfected persons cleaned their dwellings by painting. The final result would be a healthy native race for Alaska, and this would repay as few other ventures have.

Other health problems of Alaska are minimal, by comparison. It is a healthy, pleasant place to live and the climate is not unlike that of Norway, Sweden, or Finland. Most other diseases common to this north country can be prevented by immunization, and the remainder by education.

The climate will not change; the nights will continue to be long, sunless, and depressing; with this darkness there will probably continue the abnormally high number of lonely persons who go insane. But the number will lessen as radio, television, transportation, and other advantages of civilization make their appearance. Likewise, the outmoded method of transporting natives and sourdoughs outside Alaska for treatment has outlived its purpose.

As to Alaska's future, we have no doubt, for it has huge resources, as yet scarcely touched. Its geographic location is similar to many European countries that support large populations. The soil produces vegetables, small grains and fruits in great abundance. There are minerals and other resources still waiting to be developed. It awaits only a population, and that will come in time. The protection of Alaska is so vital to the rest of North America, that the military alone will add great numbers of men as well as millions of dollars in installations and salaries. Alaska will be populated all too soon.

The original Alaskan population will be diluted more and more. Soon, with the rising tide of newcomers, they will be lost, absorbed, and only a legend, but all will be American, under the Great Dipper, Alaska's flag.

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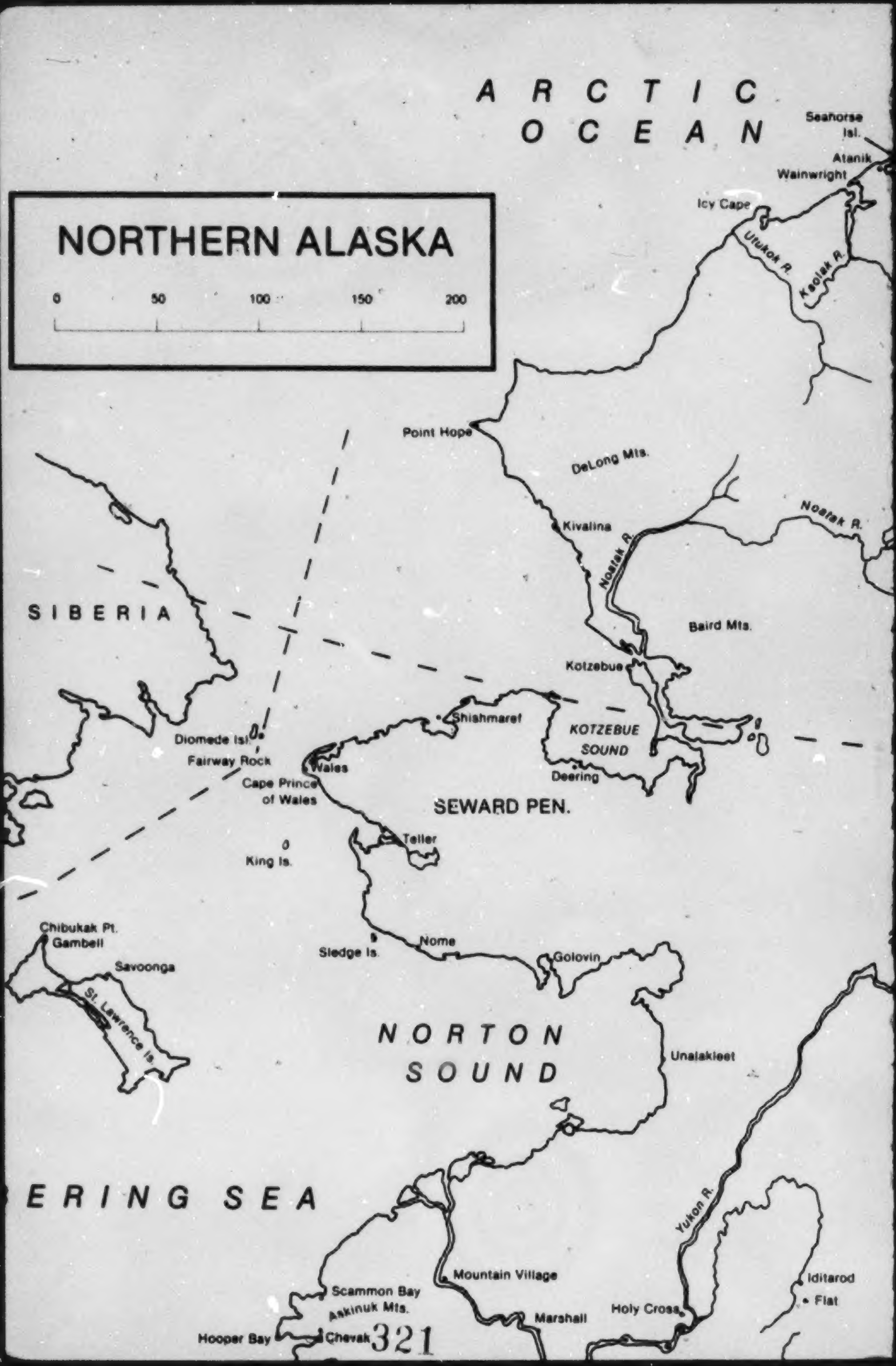NORTHERN ALASKA
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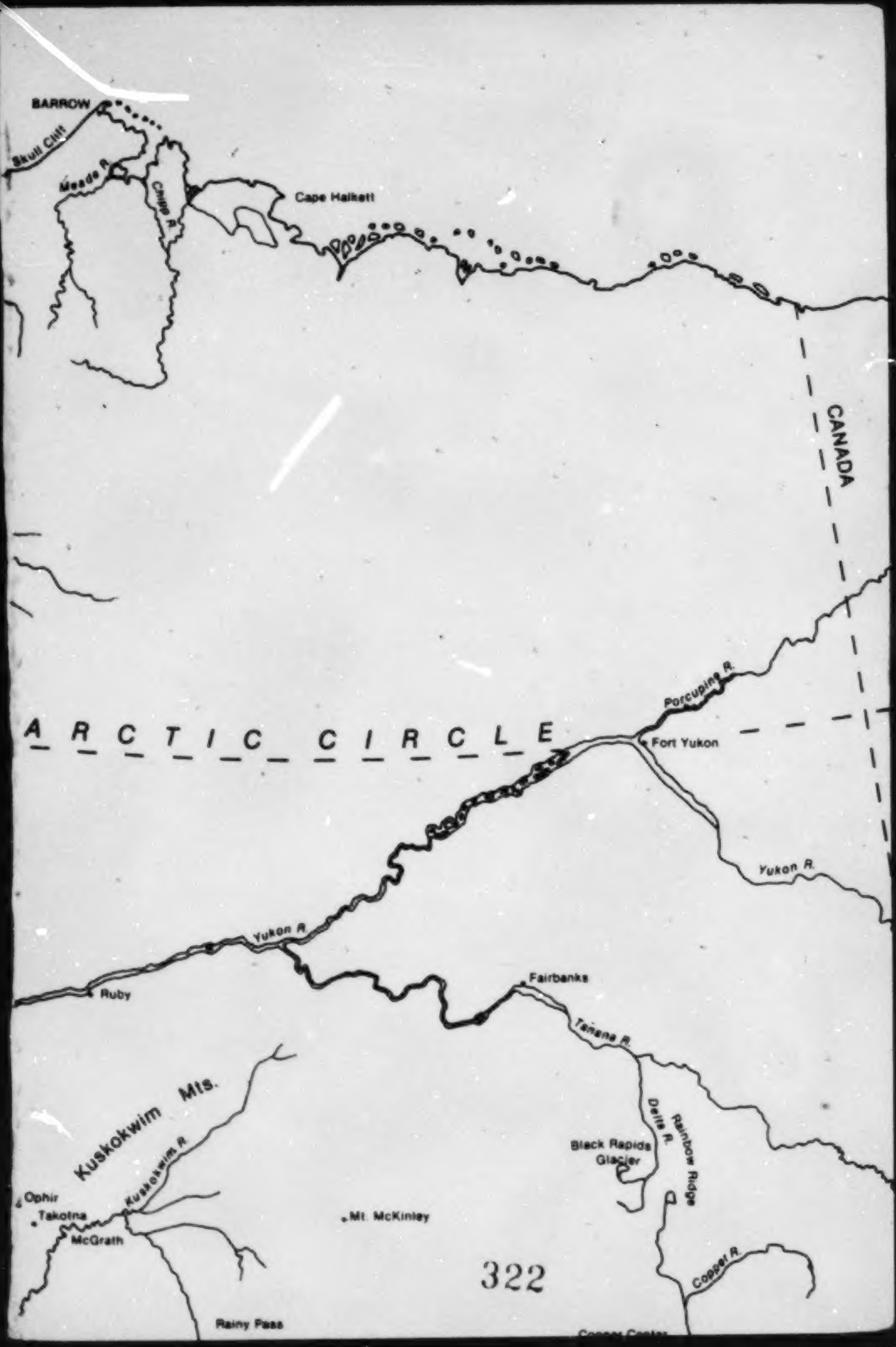
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Eskimo Medicine Man is a record of primitive Alaskan life in the 1930s. It records the experiences in Alaska's remote areas of the last "traveling physician" for the Department of Interior's Indian Service, when in all the territory (an area one-fifth that of the contiguous United States) there were fewer than sixty thousand persons. This book deals with the Eskimos of the Bering Sea, along the coast of the Arctic Ocean, the areas of the Kuskokwim rivershed and of the lower Yukon.

Otto George was born and reared on Oklahoma's Kiowa Indian Reservation. He attended the Chicago Art Institute, joined the Army (serving overseas in World War I), received a Bachelor's degree in 1925 from Portland's Reed College and a M.D. from the University of Oregon Medical School in 1930, externed at Portland's Good Samaritan Hospital (where he met his future wife, Virginia Brown), practiced in Portland, and (in order to qualify for an Alaskan assignment) passed his tests to become a surgeon with Civil Service. He spent summers with the U.S. Forest Service working in the rugged Cascade Mountains of Oregon, and winters he skied on the slopes of Mt. Hood, where he aided injured skiers in a small clinic at Government Camp.

All his years he craved for a life in the north country (Dr. George and his wife read all available books on Alaska), and when he was offered a position as "traveling physician" at Akiak on the Kuskokwim River (a place he had never heard of nor could find on the map of Alaska), he immediately accepted it.

During his Indian Service years, Dr. George kept a diary—filling eight books by recording at night the experiences of the day, noting primarily those things not found in the books he had read. These notes furnish the materials for this volume, documenting the time and the peoples and their ancient way of life—as no record ever will again.

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